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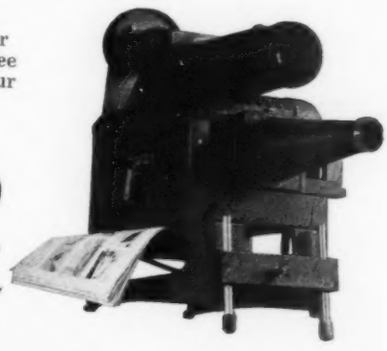

The EDUCATIONAL SCREEN

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(Courtesy of Chicago and Eastern-Illinois Railway)

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A School-Made Film Which Stands on Its Own Feet

An account of School-Film Production that gets down to fundamentals and minute details.

EVELYN S. BROWN
Harmon Foundation, New York City

SCHOOL-MADE films too often come out like home-made candy—all right for passing around to the family but not quite good enough to put in a store window. Too often the trouble has been that they have not started out in the beginning with anything particular to say and have made, perhaps, a record of school events or some local situation which is not understandable or applicable to people outside of the particular city or town.

The Harmon Foundation, in its Division of Visual Experiment, has been very much impressed within the last few months, however, in watching the work of a group of junior high school boys and girls in Norfolk, Virginia. The visual interpretations which they have made have been the outgrowth of their study and have substituted somewhat for the usual homework assignment papers which are turned in, graded, and that's as far as they go. In this case the "homework" serves a real tangible end and is available to a number of other young people in quite an understandable form. The young people who made the film have also actually experienced some of the things they were studying.

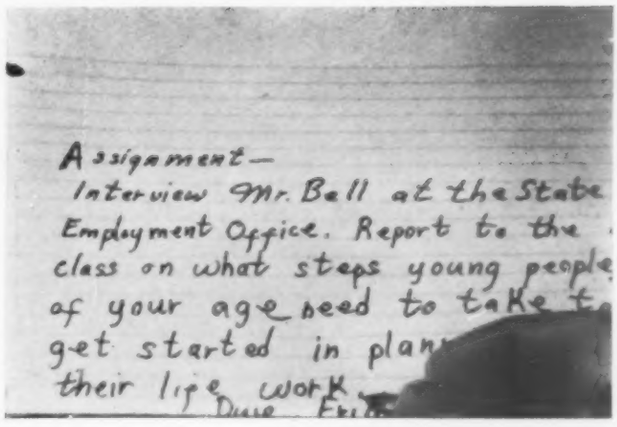
Their work in filming came about as the result of the interest of one teacher, J. J. McPherson, who had a photographic turn of mind. He found little difficulty in training the young people or arousing them to the idea of planning their studies in visual terms. Three films were made last year at the Blair Junior High School under his guidance. These were one short subject entitled *Patches In The Making,* in which it is sought to bring out the planning that goes into the presentation of a school play and how all departments of a school may cooperate to bring about a successful production; another film was entitled *A Personal Assignment* and this has to do with vocational guidance, where a boy and girl are both given an assignment to interview a vocational guidance expert in the city. As they talk to him, various scenes are shown to illustrate the advice he has given them. The third film, which is the only one more than a reel in length, is entitled *This Is Our Challenge.* It is the last film which has achieved the widest notice already and about which we wish to make particular mention.

This film was an outgrowth of the study of housing which Mr. McPherson took up in his civics classes and represents how a group of boys and girls in the eighth and ninth grade years can make a real, practical application of their school work. "In their study of major civics problems," says Mr. McPherson, "I encouraged my students to work out concrete projects. While they were studying housing conditions in Norfolk, a number of students decided that they would like to make a short movie in which conditions in Norfolk's slums could be shown and an answer to the problem could be given. Other classes in previous years had presented housing plays before the auditorium, built scale models of blocks of good and bad housing from actual surveys of slum property and drawn large numbers of posters. These students wanted to do something different and leave something behind as their contribution to a study of this problem. Since three classes were studying the same material, the class in which the idea originated decided to make the undertaking a joint project of all the 9B classes."

But how would you finance such a scheme? This is a question which would quite naturally come up. 8mm film was first thought of because the cost was so much less, but the students themselves had an idea that the 16mm film might make the finished product more widely available and decided to go ahead with it and then set to work to find their means of paying for it. *Twelve dollars* was donated by the principal of the school from his office funds, but in figuring up the costs it was clear to the young people that this was not enough. "Finally," says Mr. McPherson, "one chap suggested that we sell stock in the enterprise and then charge an admission fee and pay back the stockholders as much as possible. This idea was adopted. A business manager and two assistants were elected and a form for the stock certificate was adopted. After an actual share of stock was brought to school and examined, an art student in one of the classes drew the approved certificate form and then cut the mimeographed stencil. Each share of stock sold for 25c. Approximately $40.00 worth of stock was sold in the three classes.

With this amount of money in hand, it was possible to plan the actual production and outline the various kinds of work that had to go into the making of the film. There would be the research and planning of the scenario; there would be the photography, the selection of the sets, the props, the doing of the actual work on the photography; and there would be the titling and editing of the finished film, and finally, of course, someone in the group would have to do the pushing for distribution so that some of the original cost could be paid out.

After all these plans were outlined to the boys and girls, they were called upon to designate which phases of the production work interested them. The first committee which was selected was that for script writing and was composed of about six students. This group Mr. McPherson took on a tour of some of the slum areas so that they might get their ideas first hand as to what to cover in the script. This was quite properly included as a part of their research work but they


Assignment—
Interview Mr. Bell at the State
Employment Office. Report to the
class on what steps young people
of your age need to take t
get started in plan
their life work.

Some advice given in vocational guidance film.

A scene from the picture "Patches in the Making."

had gone somewhat further than might have been the case in just a book study and paper assignment on local housing areas.

Much of the research for the script was taken from Mr. McPherson's own notes. As the teacher of the subject which considered the housing problem, and as he had given particular emphasis to this phase of civic life, his reference material was most readily available to them. "The writing committee," he says, "referred to their notes for facts and were able to draw upon observations made while on a class tour of slum areas for ideas. During class bells the entire classes were asked to suggest thoughts." One of the lighter notes in the film shows the slum woman rolling out some dough and reaching out to crush a passing cockroach. She returns immediately to her food preparation. "This," he states, "was one of the gems that an enthusiastic youngster produced. He will probably end up writing for pulp magazines or illustrating comic books."

"For two weeks the writing committee met after school every afternoon for about an hour to work on the scenario," Mr. McPherson related. "The group would gather around in a circle and begin to make suggestions. First the outline for the story that we wanted to tell was evolved. Then the scenes needed to portray the story were suggested and desirable titles were jotted down. Five or six times the whole scenario was revised and rewritten to smooth out the whole continuity as best the group could."

Some of the by-products of this script work are also mentioned by Mr. McPherson in that he found it was necessary for him to correct English constantly and to suggest an occasional word or phrase which would bring out most effectively what some student had expressed. It would seem that the young people had a coaching in English quite as well as they did in their civics and film making.

It was from the class itself that the two camera men were chosen, and others who formed the production crew, two boys to act as property men, one to act as script boy who also took down information regarding exposure and scenes, and two make-up girls. The cast of characters was also selected from among the pupils and none of them had had any dramatic experience before. The actual photography in the film was done by these two young school boys with the exception of a few scenes. The boys measured all distances from the camera but did depend at first on Mr. McPherson in the reading of the exposure meter for the lens aperture that would be used.

Of the actual problems in the photographic work, they encountered the usual number of technical difficulties. "First we needed equipment," reported Mr. McPherson. "Since photography is my hobby, I had lights that might be used, but we needed a camera and a photo-electric cell exposure meter. A local supply store loaned us a 16mm camera and I myself gave the exposure meter for a Christmas present. The sale of stock provided money to buy film and we were ready to shoot. Later one of the boys borrowed a Victor-5 16mm camera, which we used for the remainder of the filming. It was necessary to experiment with a roll of film to get correct exposures for our film. It was found necessary to build a titler, as well, and to test it with a few feet of film before shooting our titles."

As the theme of the film covers slum areas and then goes on to show what has been accomplished in certain localities in the way of good housing in slum areas, it was necessary to select the sets that would be used. Exteriors of slum areas were easy to find and to photograph. This was done in one Saturday when the entire production crew of Mr. McPherson's classes descended upon a local area in two cars and a myriad of bicycles and set up the camera for the shooting. A considerable amount of interest developed in the locality, but in spite of this there is a minimum of "camera mugging" and a sparkle and naturalness to the scenes.

The problem in this connection that did present itself was in finding an interior of an actual slum home. It was finally decided that this should be set up, on the basis of the research which had been done, in the coal bin of the school. As Mr. McPherson relates, "Some old pieces of scenery, which had seen their best days, were appropriated and painted a drab gray to resemble dirt-encrusted walls of the home in which the property men had gone to get ideas. Finally, one Saturday morning, all was ready and lights were arranged. The camera man was set to do his shooting when suddenly a phone call came from the office of the Superintendent of Education in Norfolk. He had decided it was best not to use the building as the location for a slum movie. The disappointment was crushing. But the gang got busy and carted the entire set outside into a vacant

Three shots from the film "This Is Our Challenge."
Top: Norfolk's housing conditions for Negroes.
Center: Housing at its worst, indicated by students.
Bottom: Sanitary equipment, a feature of model housing.

lot next to the school and set it up again. This time nothing but the high March winds interfered and the scenes were all taken by lunch time." The wind is translated in the film itself in the blowing hair and dresses of the young actors and actresses, and as Mr. McPherson states, gives the appearance of a mighty drafty house.

The good housing sequence was photographed in a Farm Administration project called Aberdeen Gardens Settlement, located at Newport News. Here, again, the photography was done on Saturday.

When the film was first planned, a boy and a girl from the group who were able to do lettering were selected to make the titles. This they did on a 9x12 black cardboard, using a speedball pen and speedball white ink. Their work shows up very effectively in the film, not only from the point of view of their lettering, which is somewhat similar to what might be seen on a blackboard and gives that effect, but also from the angle of wording of the titles. They are simple, direct, and in many cases, as quick to create a visual image as pictures would be. A home-made titler, which appointed members of the class had constructed themselves, was used to photograph the completed titles and this was accomplished all at one time for all three of the films which were made.

The editing was pretty much supervised and carried out by Mr. McPherson, himself, although the processed film, as it was returned from Eastman, was previewed by the class members and the scenes were cut apart and spliced together according to the scenario plan.

Mr. McPherson emphasized the fact that any student production must have some adult supervision. "The students learn," he says, "by having the teacher explain why one thing might be a better procedure than something else. It was necessary for me to work closely with all committees to keep them to their purpose. In a totally new undertaking, such as this, students of thirteen, fourteen, and fifteen, the age group with which I worked, would become discouraged at an early date if the teacher did not show them how they could overcome difficulties that confronted them."

In the light of his own experience, Mr. McPherson makes five recommendations in order, as he says, to increase the practicability of using the making of motion pictures as an educational device in high school. *First,* he would limit the scope of the film to material that can be covered on film in not more than ten to fifteen minutes showing time. This would be a one reel subject. The housing film, he believes, should have been made in two parts. *Second,* limit the production time to a period not to exceed a month, and preferably not to exceed three weeks.

This Is Our Challenge was begun the first of March and was not completed until the end of May. "In the meantime," he says, "the classes had finished the study of housing and had gone on to a number of other topics. The scenario called for locations that were hard to get and the cast was large enough to make it difficult to find a time when all could be present for filming. It was carried on outside of class, for the most part, and placed a great burden of extra work upon the teacher and the students for a long period of time. The expense of the undertaking was large in proportion to the relatively few students who were able to take an active part in the work."

Third, plan to use this work as a means of allowing above-average students to develop abilities that are not taxed by ordinary classroom work. *Fourth,* allow free time in the schedule of any teacher who is to do this work. It calls for an enormous amount of planning in order to make it effective for the pupils. The amount of free time would necessarily depend upon the extent

of the film production work to be done, but the conducting of a project of this sort is easily equivalent to the teaching of an additional class each day.

Fifth, be sure that the students who wish to work on the film do not have other obligations that will prevent their participation in the activities of the group at frequent intervals. He believes that for those students who did participate in the production of this and the other films, the experience was most valuable. One of the values was in the spirit of cooperation which it developed. "The group," he says, "found it necessary to work together in order to get things done. Obstacles arose that required self-sacrifice and extra effort. Students of varying degrees of ability worked at the task that they were able to do and all felt a distinct sense of achievement as the project matured. They worked not so much for grades as to accomplish the job that was assigned to them. They were told that a grade could *not* be given on the work. They saw the necessity for discipline during staff conferences and during the filming of the scenes and most of them responded to my request for good conduct in an amazing manner—which was a lucky thing, because there were times when I was in no mood for horse-play. The willingness of the members of the production staff to carry out work assignments was also most pleasing. Sometimes they didn't know exactly how to do something, but they would always try."

This year the group is making a film which will show the activities of the various school clubs. This film is to be used as a public relations medium and also, it is hoped, will give new students some idea of the work of each of the clubs. It is expected that the film

(*Continued on page* 149)

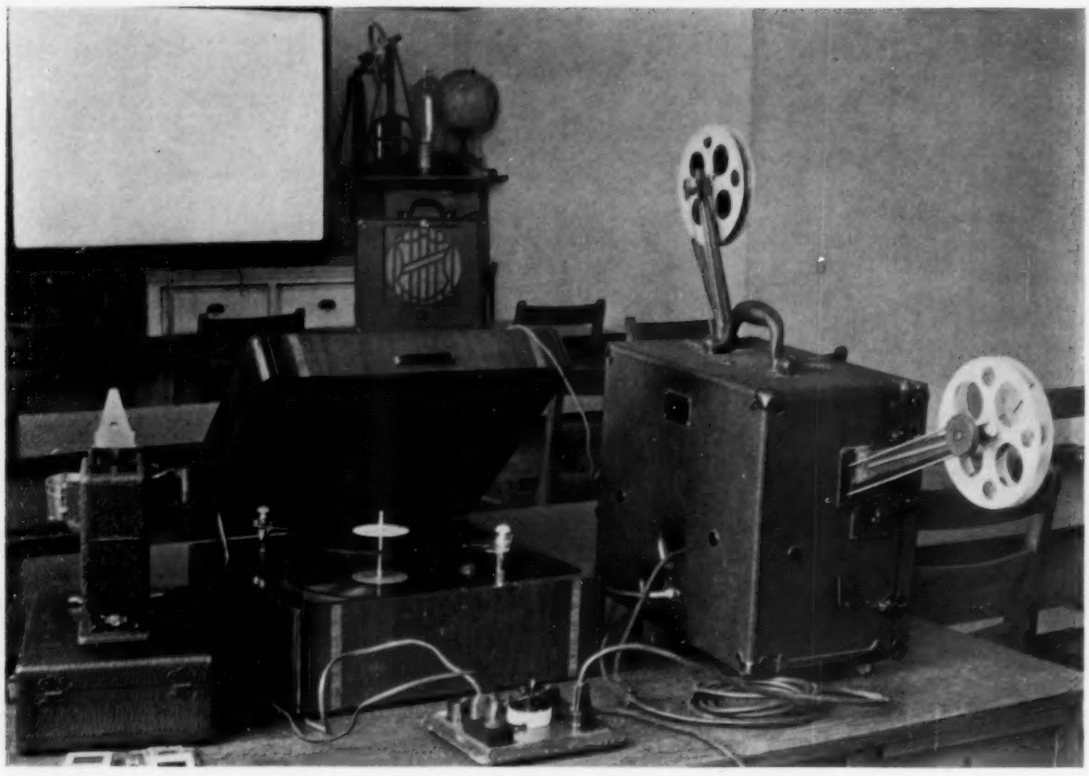
THE sudden death of Herman A. DeVry on March 23rd, 1941, removed an outstanding figure from the field of visual education and a greatly beloved man from his enormous circle of friends.

We have often pointed out that the development of the visual instruction field was possible only through the activities of business firms in that field. Visual education's debt to the commercial producers of its material is probably greater than that of any other field of American education. Millions of dollars had to be spent in experimentation and test, invention and design—in chemical, optical and mechanical research and construction—in endless modifications and refinements, adoptions and rejections—to bring to the visual field the material available today. These millions would never, could never have been forthcoming for the benefit of the school field save from great commercial resources devoted to the heavy task. This development, over the period of a full generation, required great risk, great patience, great conviction. The commercial field has measured up to these requirements. An outstanding example of such achievement was Herman A. DeVry.

HERMAN A. DE VRY
1876 1941

It was a colorful and strangely varied career that lay ahead of the nine-year-old boy who came to America from Germany with his parents in 1885. At the age of 18 he began his "business career" selling barber's supplies in Texas. Shortly, further north, he was retailing skates and baseball gloves across a counter. He ran "motion picture theatres," such as they were in that day, in Galveston, Texas; in Bisbee, Arizona. But inborn genius for things mechanical soon gained ascendancy. He was now running a bicycle-repair shop in Denver, Colorado; then, an electrical fixture shop in Tulsa, Oklahoma, where he became Tulsa's official City Electrician; there also he built an airplane! Tulsa newspapers, carrying accounts of his recent death, headlined him as "Tulsa's First Airplane Builder." He built intricate apparatus for stage use by Thurston and other magicians. Finally, about 1911, he came to his permanent home, Chicago, as cameraman with the Rothacker Corporation, and in his own cellar began spare-time work on his "first portable motion picture projector" for the visual field. To help the financing, he built Calliopes for circus use, his devoted wife doing the tuning which was beyond him. Another product of his tireless energy was a composite travel film, "Around the World in Ninety Days." When Douglas Fairbanks brought out "Around the World in Eighty Days" in 1935, "H. A." remarked characteristically, "Well, in twenty years Doug's only beaten me by ten days." The full story of Herman A. DeVry's career is of course included in Arthur E. Krows' history of the field, "Motion Pictures—Not for Theatres," which appears regularly in our pages.

We first met "H. A." personally in 1919. From then on to the end it was our privilege and pleasure to be in close and continuous touch with him as an esteemed friend, the last contact being a telephone conversation on the last day of his life making a lunch date for "day after tomorrow." We knew from intimate interviews his teeming plans, his boundless enthusiasms, his innate pioneering instinct, his fertility in invention, his genius for mechanics, and his varied and notable contributions to progress in the field he loved. But great as were his technical and commercial achievements, our warmest regard was for that unforgettable personality, compounded of deep humanness, utter sincerity, genial humor, staunch devotion to the field he believed in so completely, and generous sympathy and unwavering loyalty to his friends and fellow-workers down through the years. At his death he had just completed for the market a new projector with unique and distinctive features. His two sons, Edward B. DeVry and William C. DeVry, who have long been able associates of their father, will carry on the work under the same name and policies. The name of DeVry will live on in the history of the visual field to which he gave unstintingly his best years. N.L.G.



The Sound projector shows movies and provides amplification for the recordings. The still projector and record player switch on simultaneously.

Combining Motion Pictures

A brief summary of a noteworthy teaching procedure whereby 2 x 2" slides and records supplement films.

EARL B. MILLER
City Schools, Richmond, Indiana

THE relative educational value of slides or movie films depends upon the nature of the results expected. In most pictures both stills and movies are desirable; the movies being of value where action is an essential factor. A picture of a football game, for example, would be more exciting if the entire picture were in motion but coaches may prefer slow motion or even a still picture for detailed study.

In showing many educational films there is a desire to stop the projector and view a single frame as a still or to have slow motion on the film. Both procedures have their disadvantages. In the first place stopping a sound film is out of the question. Silent projectors are sometimes provided with a stopping device but the results are often unsatisfactory. In order to protect the film, the brilliancy of the projection must be greatly reduced which results in a displeasing effect. Slow motion has its place but it requires a great amount of film, and still pictures might give as good or better results.

Since some parts of a picture are more desirable as stills and other parts would be dull and uninteresting without the action provided by motion pictures, it occurred to us that the best results could be obtained by a combination of stills and movies. A difficulty here presents itself. If slides and movies are to be used intermittently throughout the showing the presentation would necessarily have to be done by the instructor who has thoroughly organized his procedure and by no other person. Since it is sometimes necessary for student projectionists and other teachers to show the pictures we can readily see the problem.

We think the problem has been solved through our set-up. Our pictures are taken on both stills and movies. All scenes that lend themselves to still projection are photographed on 2"x2" slides or on 35mm. strip film.

In order to add sound, which is usually desired, we make recordings on 10" phonograph records. Inexpensive recorders have recently been so greatly improved that reproduction is quite satisfactory. Improvements have also been made so that record wear is greatly reduced.

The editing consists of cutting the film into the desired parts and inserting short strips of dark blank film. These blanks serve as a signal for the operator to switch to a still picture. The 35mm. strip or the 2"x2" slides which have been previously arranged, preferably in an automatic slide changer, are switched on by a 2-way switch. The slide projector and record player are connected to one side of the switch while

An economical set-up makes use of double amplifying unit and a less expensive silent projector.

re with Slides and Sound

the movie is connected to the other. If a sound projector is available the record player may be plugged into it. As soon as the blank signal appears the switch is thrown which places the slide projector and record player in operation. At the close of each recorded explanation of the still picture a soft chime in the recording signals the operator to change the slide. Should the change be made to the movie a double or 2-tone chime rings. With this arrangement it is usually unnecessary to title the movie film as the necessary explanation may be given on the record before the movie is switched on.

By using an automatic record changer, an hour or more of continuous pictures may be shown with a 400 ft. reel and its supplementary slides. The cost of the records and the slides are much less than a continuous movie would be and there is the added feature of sound.

The author has recently employed this principle to the production of Kodachrome pictures which he took on a trip through the west. The entire showing provides one and a half hours of color and sound that has proved quite educational and entertaining.

It will be observed from the illustrations that compactness would be a desired factor. This requirement might be met by a combination outfit whereby the projectors and record players could be in one unit. Recording of 33⅓ R.P.M. might be used for economy.

A School-Made Film Stands on Its Own Feet

(*Continued from page* 147)

will probably be completed in a short time—well before the strenuous period at the end of the school year.

That the training in film work of the previous two years has been helpful is quite evident, says Mr. McPherson. "I hated to see this first session close because some of the boys and girls who have worked with me in film production for two years are going to the senior high school. They had become so proficient that I could send them out alone to take almost any type of shot, interior or exterior, and they could handle it beautifully. The first couple of hundred feet of the activities film (this year's production on extra-curricular school work) they have done almost without advice and have produced results that technically are far superior to the photography in the housing film."

So much interest from outside persons, including the Farm Security Administration, whose project was shown in *This Is Our Challenge*, developed under its own momentum that it was necessary to have a copy made for distribution. From the Wheeling, West Virginia, Housing Authority the following statement was made: "The cinematography group of the Ohio Valley Camera Club gave it the first viewing on Monday evening and were high in their praise of the good quality of the editing, titling, and the photography itself. Later in the week it was used four times at Linsley Institute (Boys' Junior College) where the dean was prevailed upon by some of the students for permission to do a similar job. Equally good reports came back from the principals of Madison School and Warwood High School and from Thompson M. E. Church, where two Boy Scout troops gathered to see it. The Y.M.C.A.

(*Concluded on page* 169)

MOTION PICTURES—NOT FOR THEATRES

Installment 26 is a further chapter of two decades ago. While experimenters explored novelty techniques in non-theatrical pictures, research specialists were finding teacher-training ways, means and standards

By **ARTHUR EDWIN KROWS**

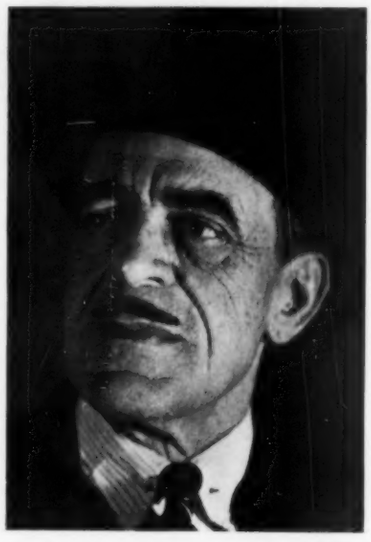
THE younger critics, ever ready to deprecate the findings of experience in which they did not happen to participate had only to look back to 1915 to see virtually all of these methods full blown in Mack Sennett's Keystone Comedies, if they did not care to go further back to the days of Éclair, Thanhauser and Lubin. But in those far-off seasons films had been despised by the intelligentsia, and fledgling reviewers were conscious of nothing but the echoing scorn. This foreign resurrection now was new to them, and they hailed it as progress. So Hollywood producers said, "If this is what the public wants, let us revive it, too." Forthwith they turned their better equipment to imitations of the fashion, but down in their hearts their seasoned convictions remained, and they heaved a sigh of relief when the fad began to wane. Nevertheless, this disruption of slowly perfecting professional method has proved useful in reminding true artists of resources which might otherwise have been forgotten or ignored. And, with schoolmen now attentive for being at the awakening of a visual education movement, the foreign jolt to attention had an added importance non-theatrically.

When the native reaction was at its height, the services of cameramen who could best perform these fantastic tricks were at a premium. Carl Gregory could accomplish most of them at home on his celebrated optical printer. It would have been child's play also to John Holbrook. But they were "old-timers," and the present demand was for "new blood." None in this eddy of the youth movement reached the temporary fame of Alvin Knechtel, a clever young photographer whom I knew when he was an obscure but promising technician at Pathé. At the proper juncture of time and tide he found a place for his especial talents. He rang the changes on multiple exposures, shooting through prisms, zooming and performing other cinematographic sleight-of-hand to the mystification and presumed delight of new audiences. In Hollywood he even attained the distinction of being credited on main titles for "camera effects," a precedent which his fellow-workers in the line were quick to seize for themselves. Then, as Alvin Knechtel became prosperous, he was able to indulge in his hobby of flying. About 1930 his ship crashed and he was killed.

The Puppeteers

IN this period of the early twenties, attention was drawn to a fresh departure along a road opened long before by Commodore Blackton, when he worked magic with animated toys, and more recently noticed when Jack Leventhal made life patterns with blocks to train the soldiers. For this newest spurt that versatile genius, Tony Sarg, the illustrator, was in a way responsible.

About 1915 Sarg, financed and otherwise encouraged by the noted stage producer, Winthrop Ames, had turned the main stream of his abundant energy into giving marionette shows, thereby becoming the acknowledged "father" of the modern puppet movement in America. The idea of presenting the puppets in films was in natural sequence, and there presently came to pass a series of novelty shorts entitled "Tony Sarg's Almanac." For this release Sarg prepared a number of comic episodes performed in silhouette by "prehistoric" characters. Unhappily they were not especially funny, but they were masterpieces of detail in motion.



Herbert M. Dawley's startling recreations of prehistoric life opened a new vision of possibilities in using movies for teaching apparatus.

To the uninitiated they seemed to be just extraordinarily smooth animated drawings. Actually, they were pictures of beautifully articulated, two-dimensional shadow puppets, clearly inspired by those of the old Chinese shadow theatre, photographed, however, by the well known animation "stop-motion" principle.

As shadow plays these were not the first upon the screen. A recent series of silhouette performances on the film had been that entitled "Inbad the Sailor," produced with human figures by the illustrator C. Allan Gilbert, under the Bray patents, and released through Paramount beginning January, 1916. So far as puppet plays in celluloid were concerned, they also had been occasionally known. One of the earliest in my own recollection was a marionette baseball game in Gaumont's "Reel Life," about October, 1916.

Sarg, with his manifold interests, was obviously too busy to execute the appalling amount of labor involved in these productions personally. That phase was cared for by Herbert M. Dawley, artist and actor. Herbert Dawley outfitted a small studio in his home town of Chatham, New Jersey, not far from New York City, acquired a modest, but enthusiastic and efficient staff, and went to work.

With a camera poised overhead, Major Dawley photographed the silhouetted figures lying flat in the horizontal plane, substantially the same arrangement used for animated drawings save that his field of camera vision was much larger than usual. His animation table was so very sizeable, in fact, that he and his entire technical staff could sit upon it to confer, and frequently did. The cut-out figures representing human beings were, I believe, approximately four feet tall, with all other surrounding subjects in proportion. The articulated joints were moved bit by bit between exposures, with a mathematical accuracy and artistic delicacy which gave an entirely new screen pleasure. Movements were astonishingly detailed and varied, fingers and toes twiddling, eyes opening and closing, bodies breathing, and all as smooth-flowing as anything ever accomplished by Max Fleischer in the early days of his amazing Ko-Ko—save when a figure made a turn and went in another direction. This was always done with an odd, catlike swiftness, the reason being that the figure was only a two-dimensional profile, without thickness. All properly in keeping, however, with the convention of presentation, in silhouette.

Had there been at that time any considerable groups of dilettante photoplaygoers, these interesting efforts might have found a truly appreciative audience, for they had all the charm of the old German shadow plays without their mechanical limitations. But the order in America then was for mass entertainment—racy, violent, vivid. The deliberately slow pace for proper enjoyment of the quaint fun, was found boresome by a restless crowd craving excitement. How could a silhouette complement of a thumb and four fingers on one hand, as Dawley showed them, hope to be noticed by theatregoers who still have rarely observed that Mickey Mouse and the other merry conventional screen cartoon characters of this present day, have only three fingers on each hand as a draughtsman's convenience?

The "Almanacs" became available finally for non-theatrical use, and, with renewed hope, Major Dawley turned to that field with his equipment. The edu-

cators admired, but could not afford to buy. A few industrialists consented to try. General Motors was among them. For that corporation Dawley produced a moving frieze representing the history of transportation. It was entitled, "Man's Conquest of Time."

Although there were so few to employ these rich talents, the Major was not completely frustrated. Like Tony Sarg, he was blessed with other fascinating abilities. For instance, he was a puppeteer, and a good one. With his marionette companies he went on tours. He appeared as an actor in stage plays. He painted designs. Over the pleasant countryside where he lives, they still talk about his stirring performance at the local little theatre in Barrie's "The Old Lady Shows Her Medals." I recall his efficient stage management of a new Broadway play by Austin Strong. He has taken from an overnight case in my office, and walked across the floor for my pleasure with an uncanny simulation of life, a yard-high *Ichabod Crane* that had entertained thousands in Dawley's own dramatization of Irving's "The Legend of Sleepy Hollow."

While working with two-dimensional figures in time-lapse or stop-motion photography, Dawley had been devising ways and means to present three-dimensional animated figures on the screen. Of course, regular marionettes might have served here, and, when it came to presenting persons, what could be said against trained actors? Merely that Dawley was thinking of simulating a life which mankind supposed to have existed but probably never actually knew, the period of the dinosaurs and the other strange creatures of a fabulous, prehistoric world. Cuivier may have "restored" a fossil beast from a single remaining bone, but Dawley planned to show the same animal living and breathing. As a puppeteer he understood action in the third dimension; as a motion picture technician he understood the intricacies of photographing arrested motion; Sarg and he had long been intrigued by dreams of those dimly distant fairy tale monsters, and—why not try it?

Accordingly, late in 1918, Dawley released a single reel subject called "The Ghost of Slumber Mountain," in which prehistoric monsters were shown in credible motion. It attracted attention briefly, and then, being followed by only one other of the same sort, "Along the Moonbeam Trail," became quickly forgotten, save for the fight between a dinosaur and a brontosaurus, which reappeared in later years as introductory material for industrial pictures dealing with the history of coal and oil. The bookers remembered "The Ghost of Slumber Mountain" a little longer than usual because it was reported that its foreign rights had sold for the highest sum then paid for a one-reeler. If the educators noticed it, they made little or no comment, and seem not to have been stirred to inquire into further possibilities. Yet, both subjects mentioned were shown currently before the American Society of Zoölogists.

The evening of June 2, 1922, at the Hotel McAlpin in New York City, the Society of American Magicians gave a testimonial dinner to Sir Arthur Conan Doyle, eminent author, creator of *Sherlock Holmes*, spiritualist leader. It was a long session filled with mystifying demonstrations. At one o'clock in the morning Sir Arthur presented his own "act," which proved to be a motion picture of prehistoric monsters, "psychic" and "preternatural." The reel had been produced, Sir Arthur confessed later to his friend Houdini, as part of an intended picturization of his story "The Lost World." Major Dawley read the newspaper accounts June 3, and immediately entered a strenuous protest, alleging infringement of his patents and declaring that he would halt the "Lost World" picture by injunction. The actual producer, it transpired, was Willis O'Brien, employed by Watterson Rothacker in Chicago. O'Brien was a native of Oakland, California, a former cartoonist on the San Francisco *Daily News*, and sculptor's assistant at the San Francisco World's Fair in 1913.

The statement, subsequently made by Dawley to inquiring reporters, revealed the basis of his claims and the extent of his labor to produce his own "dinosaur films." With the permission and coöperation of Professor Henry Fairfield Osborn, director of the American Museum of Natural History, he had made carefully-checked preliminary drawings of the evidences there concerning prehistoric life, and had squared each "key position" of his represented figures with paleontological data. His patents covered articulated metal skeletons, artificial sinews and an elastic substance of his own devising for hides. These secrets, he surmised, had been applied without authorization by a man who had formerly assisted him and afterwards worked for Rothacker.

To these charges then were added those of Catherine Curtis, who, with careless disregard of some other ladies in films, described herself as "the only woman producer," and stated that in July, 1920 she had purchased from Watterson Rothacker the screen rights to "The Lost World" with the understanding that O'Brien and Dawley were to be employed to work out models and plan the method of photography. But the storm presently subsided, without further squabbling in public, and several years later "The Lost World" was produced with O'Brien credited for the model work. Much later O'Brien also did the "miniature" animation for the sensational film of the same production order called "King Kong." Some of the interesting further history of the upright and righteously indignant Major Dawley will appear later in these pages.

I suppose that I myself was a lesser pioneer in puppet pictures, in the non-theatrical sense, at least. It all transpired about this same time, when Dr. Iago Galdston, connected with the New York Tuberculosis Association, as it was called then, decided to attempt such a film for propaganda purposes. Remo Buffano, who since has become celebrated in his line, was then a struggling puppeteer living in New York's Greenwich Village. He was eager to try out his little figures on the screen, and, lacking the money to do it himself, proposed that the Association should pay the actual out-of-pocket cost, he, Buffano, to supply the play, the puppets and the operators. Galdston agreed, and called in Carlyle Ellis, with whom I was associated at the time, asking him, on the same experimental basis, to contribute the film production factors first for nothing and then at cost. Ellis consented to the latter plan, and, knowing that I relished camera adventures, referred the production to me.

The story, not to exceed one reel, was to teach health habits to children, and the central figures were to be a princess, representing good health, and a dragon, symbolizing disease. Buffano, filled with the Italian puppeteer's usual plots of the crusading knights of Christendom and the wicked Moors, had written a characteristic story around these elements. I adapted it into continuity form, and, after the script had been approved, Buffano and his wife costumed the puppets and designed the scenery. The background was painted in the usual way, to be viewed from one position. But the camera requires many positions; so, while Buffano looked on a little disapprovingly at first, we rearranged his settings for our varying camera angles.

We started at eight o'clock one morning in a back room of Frank Tichenor's office suite in the Candler Building. Buffano, his wife, and a couple of other operators worked the puppets, and Walter Pritchard turned the camera crank. At five minutes to midnight we put the last scene in the box, and the night watchman put us out. The resultant subject, "The Hungry Dragon," was well liked and saw long service.

The Surge of Color

Probably the greatest concerted efforts at technical improvement had been to find a practical natural color process. The synthetic methods had their place, but they were not accurate renditions of the original scene. It is no wonder that the theatres sought it, for color is emotional in its effects, but, in most non-theatricals where emotion in the popular sense was not favored, the need was pronounced, too. Surgeons wanted to be able to distinguish veins, tissues and bones in their films of operations; botanists required color for their flowers; industrial pictures called for natural colors of foods and precise shades and tints in textiles.

To achieve this end Kinemacolor had made common property a useful principle known to scientists since 1861 when Clerk Maxwell had demonstrated it in a lecture before the Royal Institution in London. It amounted to this: Take two separate photographs of the identical scene through red and green filters. By projecting the prints through similar filters simultaneously, or in quick succession, presto, you have a colored picture! It seemed very simple, and it still seems simple to those who have never tried it. Kinemacolor used the succession plan, running its films twice as rapidly as the ordinary black-and-white kind. The immediate, serious drawbacks were that

usual theatre projectors were not geared to such speed, the filter mechanism was extra equipment, and, of course, no exhibitor wished to go to the expense of making such changes until he could be assured of a steady supply of popular pictures requiring them. A difficulty, which was seen to be graver than was at first suspected as the early novelty wore off, was that the range of red and green in combination does not fully match that of the spectrum. The three basic pigmentary colors are, roughly, red, yellow and blue, and green is a combination of yellow and blue, which, on a filter does not resolve itself so readily into its components. The primaries in light are different from those in pigments—red, green and blue-violet. There could, of course, be a third filter and a third picture to correspond, but the film would then have to be run at the tearing speed of thrice the normal rate.

The practical line of development seemed obvious. The colors must be actually on each individual picture for normal projection without filters. That answer was worked out temporarily in the next successful process called Prizma, by William V. D. Kelley. Kelley was born at Trenton, New Jersey, in 1877, ended his formal education in high school, and is said to have had his first important business experience working in department stores. In his Prizma process he photographed red and green images, too, but, in printing, put them one behind the other front and back of the film, and colored them directly there. His experimental work had begun about 1912, but his first important public showing did not occur until the evening of February 8, 1917, when Prizma was exhibited at the American Museum of Natural History in New York, with a lecture by Dr. Ernest Fox Nichols, professor of physics at Yale. February 20 it made its theatrical *début* at the Strand, on Broadway.

In September, 1917, it was announced that the world traveler, Dr. Edward G. Salisbury, would photograph pictures of China and Japan by the process. Another celebrated traveler, Dr. G. A. Dorsey, undertook to photograph the vessels of the U. S. Navy, and his Prizma films resulting were shown in the first week of January, 1918, at the 44th Street Theatre, New York City. Prizma, Inc. was now well launched, and a staff was organized. Among others engaged was Howard Gale Stokes, until then and for seven years previously copy manager of the New York Telephone Company. Stokes became production manager of Prizma Educational Color Pictures, a year later editor of the Capitol Theatre Colorland Review made by the Prizma process, and in 1920 executive vice-president of Prizma, Inc.

Nearly fifty distinct color processes for films have appeared in the quarter century reviewed by these pages, and most of them were known basically when Prizma was in the lead. Technicolor, which was to supplant Prizma in popularity, was known as a name, at least, in 1916, when the corporation started in Boston with a method requiring the projectionist to keep two separate color images in superimposition. The two separate films bearing the images were each of only one-half the thickness of regular film, and the presently realized scheme was to cement these together, thus making a combined positive which might be shown effectively on any regular black-and-white projector. In uninformed "Rialto" or "Film Row" gossip, this was commonly referred to as a "split film" process.

In December, 1916, C. A. ("Doc") Willat, a great favorite in New York's motion picture circles, left for Jacksonville, Florida, with a company of players and production assistants, to make the first Technicolor dramatic feature, "The Gulf Between." This production was shown completed to admiring reviewers on Broadway, October, 1917. The backers had their troubles, however, and Prizma was not affected at once by the competition.

Associated with the Technicolor group, and destined to become the foremost figure in it, was Herbert T. Kalmus, a shrewd, able chemical engineer. He was a New Englander, about thirty-six years of age, graduate of and one-time instructor at the Massachusetts Institute of Technology, widely traveled, cultured, recently director of the Research Laboratory of Electro-Chemistry and Metallurgy for the Canadian Government. Under his firm hand the Technicolor process changed and grew into something finer and more practical. At various times in the long transitional period it resembled other existing processes, and usually on each occasion another "first Technicolor feature" was produced. Among those other firsts have been "The Toll of the Sea," with Anna May Wong, "The Black Pirate," with Douglas Fairbanks, and "Becky Sharp," with Miriam Hopkins. The "Black Pirate" period, about 1926, boasted a two-color, double-coated film. The "Becky Sharp" heyday, beginning in 1935, glorified a lithograph process called "imbibition," using three colors superimposed by gelatine matrices holding the respective dyes, over a black-and-white key image made from the green negative.

For the non-theatrical producers who could not afford the rather expensive leading color processes—or could not obtain them at all because on small orders service sometimes could not be had for several months—Brewster Color, provided by P. D. Brewster, president of the Irvington Machine Company, manufacturers of motion picture equipment in the New York metropolitan area, was favored until the gradual disintegration of the Prizma organization made that process easily available.

The technicians divide color processes into two broad varieties, "additive" and "subtractive." By the additive method colored images are obtained by mixing colored lights, in the subtractive the image is already in combined colors on the film.

About 1925 the forces were gathering to arrange a real American *début* of one more important color process. Still, even this had been invented as early as 1908, in France. The rights to that so-called Keller-Dorian process were bought about 1925 by the Eastman Kodak Company of Rochester, which renamed it Kodacolor and, because of certain mechanical limitations and a desire not to disrupt existing theatrical color processes used by company customers, introduced it first for 16-millimeter projectors exclusively—in 1928. (Kodacolor is not to be confused with the later and more generally familiar Kodachrome.) It has become known also as the "lenticular" method. A tri-color filter, in bands, is fitted into the lens aperture. The film used is of an especial sort, being engraved with hundreds of tiny round bumps, each of which separately reflects the three colors of the filter and thus provides its own color separation of the light rays reflected into the camera by the image. As it would be extremely difficult and perhaps impossible to make contact prints upon similarly engraved positive film, the negative is developed beyond the usual point to convert it into a positive. As a positive it is then projected through another tri-color filter, and the result upon the screen is generally very lovely. The only grave trouble is that there is but one print of the given subject, and no negative. Experiments which bear promise of providing prints are along the lines of re-photographing the projected image on lenticulated film. The Eastman Kodachrome process is "subtractive," the film having several coatings, each layer sensitive to a different color.

Commercial advantage in all of these processes requires low initial cost and a cheap provision of duplicate prints of uniform quality. Production charges are gradually descending. Duplication of prints is not yet practical in all cases. The problem of their uniformity still has vexatious aspects involving unsatisfactory dyes, uncorrected projection lenses and uncontrolled projection light. Under unceasing, intelligent assault the problems are breaking down. Quite certainly the non-theatrical field will one day have color, true in value, nominal in cost, plentiful. But, in those early years of the visual education movement, proper color, away from the amusement screens, was just an empty dream.

Training the Teachers

With the first sweep of the post-war visual education movement it became increasingly clear that a problem correlative with that of providing school films was to teach teachers to use them. Not how to apply them, that is (although that was a question serious enough), but how to obtain and operate projectors, how to splice film, how to care for the picture supply, and where to get all the various items required by the whole activity. It was especially necessary to meet this problem because so many eager school pioneers were depending for their results on second-hand machines and worn theatrical product. For those able to afford new equipment and lucky enough to have it, there were, of course, the usual printed instructions provided with every machine. Such a booklet was James R. Cameron's *Motion Picture Projection*, distributed, beginning in 1921, by the Theatre Supply Company, of New York.

(To be continued)

Proceedings of the Winter Meeting of the Department of Visual Instruction of the National Education Association

(Concluded from March issue)

How Can We Bring About Better Utilization of Visual Materials?

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THERE is general agreement in the literature of the visual field concerning the need for the training of teachers in the use of visual aids. The consensus of opinion is that teachers must be shown the possibilities of visual materials and given some help in their utilization if the visual idea is ever to become a completely effective, dynamic, educational force. It is, therefore, the purpose of this discussion to find ways and means of improving both "pre-service" and "in-service" training of teachers in visual techniques.

This consideration of teacher preparation is pointed to a definite program of action. At least, an attempt is made here to compile some definite recommendations which school superintendents, principals, directors of visual education, and heads of teacher training institutions may wish to consider and follow. This memorandum of possible "things to do" is built around the following five questions:

I. How can we Improve the Organization of the Visual Training Program in Teacher Training Institutions?
II. How can we Improve Existing Basic Courses in Visual Instruction?
III. What can be Done to Stimulate the Needed Growth of Visual Courses?
IV. What are the Most Effective Devices of Helping Teachers-In-Service?
V. What can we do to Increase the Number of Departments and Directors of Visual Instruction?

I. How Can We Improve the Organization of the Visual Training Program in Teacher Training Institutions? One of the most constantly debated issues involved in pre-service training is whether teachers should be trained by separate visual instruction courses or by means of special methods courses. The proponents of the latter method argue that little is accomplished in the study of visual tools unless they are related to subject matter content and used in learning situations in which they are designed to function. Another argument is that the field is too broad for any one person's grasp or treatment. Proponents of the separate course method say that the important information to be gained about the tools and their use is so extensive as to require separate treatment. They also point out that many teachers of special methods are untrained in the use of visual materials, that as a practical necessity, the "core" course is needed as a starting point, and that unless special attention is given to these visual tools, no attention will be given.

That these two methods are not unalterably opposed is rarely recognized. The question is not an "either-or" proposition. There is truth in both sides. Visual materials should and must be studied in their functional relationships. Attention should be given to the tools in special methods courses where such courses exist. Separate visual instruction courses are needed for the reasons given. Above all, opportunities to utilize these devices under helpful supervision in directed or "practice" teaching courses must be provided. The question is not which one of these plans we should undertake, but how may we set out to incorporate and integrate all of them into a meaningful, effective and efficient program for the prospective teacher. Carefully planned attention to visual aids in each of these areas does not constitute over-emphasis of the visual idea. It is rather the consideration which prospective teachers must give to the "tools of their trade."

The following recommendations, therefore, seem pertinent for teacher training institutions:

1. Give due attention to visual materials in the methods courses in specific curriculum areas. If the teachers of such courses lack training and experience with visual aids, the director of visual instruction or the person who teaches the general course should work with them in special meetings, conferences, and the like.
2. Integrate with the work in the special methods courses, a separate course in visual instruction.
3. See that opportunities and facilities for the utilization of visual materials are provided in directed teaching courses.
4. Integrate all of these activities into a meaningful, whole program.
5. Offer the general or separate visual instruction course during the regular session as well as in the summer session.
6. Offer the visual instruction course as an undergraduate course as well as a graduate course.
7. See that instructors in the subject matter fields in the college training courses use visual materials in their teaching.

II. How Can We Improve Existing Core Courses in Visual Instruction? Separate courses in visual instruction are subject to much deserved and undeserved criticism. Recently someone remarked: "I understand that visual aids courses generally are pretty poorly taught." When he was asked in what respects they were poor, he could not answer. On the other hand, more definite comments have come from teachers who have taken such courses: "That course was too theoretical." "We were taught photography, but little else." "It was mostly motion picture appreciation." "I can operate projection equipment now, but I do not feel very confident of my ability to teach with it." "All we did was look at motion pictures." "The instructor was married to lantern slides." After such comments, there is a real pleasure in hearing good reports: "The course was very helpful in my teaching." "It was the most practical education course I ever had." "It was something definite and tangible—something we could get our teeth into." These teacher appraisals are probably some evidence of the success, or lack of it, which we are attaining in visual aids courses. How can we bring about the good evaluations and avoid the unfavorable ones? What can we do to improve existing courses? Some possible answers are:

1. *Conduct the study of the various visual aids, insofar as possible, with due regard for their functional relationships in definite areas of instruction.* Provide opportunities to observe the actual classroom use of tools. Include demonstration lessons in the course. Create learning situations for purposes of demonstration. Apply as many visual techniques as possible to the teaching of the information content of the course.

2. *Make the visual instruction course a laboratory course.* Include in the laboratory as many visual materials and units of equipment as possible. Provide opportunities in the laboratory for actual practice in the selection and evaluation of materials, the planning of utilization, and in the preparation or production of materials. The laboratory is the place to learn the mounting and filing of flat pictures, the making of lantern slides and other still picture types, the operation of projection equipment, the making of exhibit units, the use of sound recording apparatus, etc.

3. *Attempt to develop leadership in the field.* Make one of the objectives of the course the growth and encouragement of those teachers who may func-

tion effectively for in-service training purposes in their own school systems. Suggest the possibility of growing into directors of visual work in formally organized departments of visual instruction. Consider carefully the methods and problems of in-service teacher training. In this way, the general course may become a continuously expanding system of disseminating important information.

4. *Realize fully the importance of building a successful visual course, and the dangers of a mediocre one.* Considerable attention is centered on visual instruction courses. They are "on trial." They must prove themselves. Continued success will mean more favorable support from teacher training institutions. Questionable success means the retardation of the visual aids movement. The instructor, therefore, has responsibilities not only to his class, to his institution, and to himself, but to the whole visual-sensory aids movement.

5. *Help students to evaluate terminology in the field.* One of the greatest needs in the visual field is an accurate and meaningful nomenclature. Many of the loose and narrow interpretations and possibly some of the questionable procedures which persist are due to an inadequate, even misleading terminology. We have long been aware of the inadequacies of such terms as "visual education" and "visual instruction." The term "audio-visual" has the disadvantage of delimiting the field to the sensory experiences of "seeing" and "hearing." The term "aids" suggests that the materials we are studying are supplementary, not indispensable. The student will still find in the literature ridiculous references to "educational movies" as well as to such hackneyed pronouncements as "One picture is worth 10,000 words," and "87% of all our learning is visual learning." On the other hand, "perceptual learning" is a new and promising phrase which puts emphasis on *learning,* where it should be, and suggests the importance of sensory experience and *pupil reaction to that experience.* Unless students become aware of the particular weaknesses and merits of the various terms, we shall probably never develop the accurate, descriptive terminology which will give meaning and dignity to the field.

III. What Can Be Done to Stimulate Needed Growth of Visual Instruction Courses?[1] The following general recommendations may suggest more specific ways and means to stimulate the growth of formal courses in visual aids:

1. Make existing courses completely successful.
2. Make the teacher demand for visual courses known to teacher training institutions through existing educational organizations.
3. Make teacher preparation in visual techniques a requirement for certification or graduation as is done in Pennsylvania and New Jersey.
4. Emphasize to teacher placement agencies the need and demand for work in visual instruction courses. In applying for positions, teachers should list such training in their credentials. In hiring teachers, superintendents might specify such training as a desirable qualification.
5. Acquaint teacher training institutions with the nature, objectives, and scope of existing visual aids courses.
6. Help institutions locate or develop personnel with the experience and qualifications for teaching visual aids courses.

IV. What Are the Most Effective Devices for Helping Teachers-In-Service in the Use of Visual Materials? Superintendents of schools, departmental supervisors, city and state directors of visual instruction, can accomplish a great deal through the following methods:

1. Encourage teachers to enroll in visual aids courses during their work in university or college summer sessions.
2. Organize and promote extension courses or evening classes for teachers.
3. Organize regional conferences on visual problems.
4. Conduct short courses or a series of informal meetings for the purpose of helping teachers with special problems.
5. Conduct annual state-wide visual instruction institutes.
6. Work with teachers in their faculty or departmental meetings.
7. Provide helpful supervision of class utilization of visual materials.
8. Supply printed materials, monograms, handbooks, on matters which teachers need to consider.
9. Arrange demonstrations of utilization techniques.
10. Integrate the in-service training program closely with the work of departmental supervisors and existing faculty committees.
11. Provide improvement sheets or self-analysis check-lists so as to enable teachers to evaluate their own use of visual aids.
12. Recognize outstanding work with visual-sensory materials.

V. What Can We Do to Increase the Number of Departments and Directors of Visual Instruction? The solution to most of the difficult problems involved in the utilization of visual materials lies in the work of a competent director of visual instruction. "In-service" teacher training is one of these problems. In addition to the mechanical activities involved in the administration of a visual program, there are, as we have seen, a host of teacher training and supervisory functions. These activities are most effectively handled by a director of visual instruction. The personnel in charge of the visual program is considerably more important than materials and equipment. Given a director of visual instruction, materials and equipment will follow in a well-organized, systematic, intelligent, supervised program of utilization. But school superintendents and boards of education generally have not appreciated this fact. Materials and equipment are still purchased without any special provision for administration. No money can be found for even a half-time supervisor or director. Yet, the director's activities can vitalize and help more departments and areas of instruction than any other school program. How can we convince the hesitating school administrators and the doubtful school boards?

1. Arrange for the school superintendent, who is sufficiently interested, to visit a good department under a good director and see its operation at first hand.
2. Emphasize the administrative phase of the visual program in formal visual instruction courses, particularly at the graduate level.
3. Persuade superintendents to include discussions of the administration of visual work on the programs for their meetings.
4. Show school administrators how the troublesome visual problems which exist in the local system are handled in other schools of comparable size.

We have tried to indicate some definite ways of improving the utilization of visual materials through more effective "in-service" and "pre-service" programs. Teacher education is a matter which we cannot afford to neglect. We cannot pass such training off as "the other fellow's job." It is our job, and must be done well. The questions set forth here are important considerations for all of us. The suggestions made are not complete or exhaustive, but may serve as the point of departure for further thinking and action. It is hoped that some of the recommendations will be helpful in attacking both phases of the teacher training problem.

What Visual Aids Are Schools Producing?

Summarized by
WILLIAM G. HART
Dearborn, Michigan

THE following generalizations represent a synthesis of the animated two-hour discussion:

1. Teachers are especially interested in the production of 2 x 2 slides, glass slides, and movies. All questions and comments dealt with one or more of these three devices.

2. There is great interest in 2 x 2 color slides. More than half the total discussion time was devoted to the making of Kodachromes. It was pointed out that these slides provide the cheapest way by which the average teacher can get natural color, and that the camera and projection equipment are highly portable and relatively inexpensive. In addition, such slides can be produced by fairly simple photographic techniques.

3. A major problem is that of helping

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1 The National Education Association group discussing this question at the Atlantic City meeting adopted the following resolution:

"We urge that the Department of Visual Instruction of the National Education Association recommend to teacher training institutions the development of a program in perceptual learning which will include a basic course with laboratory facilities, integrated with special methods courses in definite curriculum areas and with directed teaching courses which will give experience in the use of visual equipment and materials.

"It is further recommended that the Executive Committee direct the Secretary of the Department of Visual Instruction to communicate this resolution to the proper authorities in teacher training institutions."

Slum conditions contrasted with modern housing development in "The City."

teachers gain the skills necessary to make good materials. The point was made that most of the technical errors in school-production are of an elementary nature. How, the question arose, can we improve the dissemination of information regarding basic techniques? The answer must come from the concerted use of many devices. More articles are needed in educational journals. Summer courses should have laboratory facilities. Workshops in production would help. Cooperative projects, such as the Traffic Safety Film Project, are promising. An exchange center (the D V I was suggested) is needed for school made films, slides and scenarios.

4. School-made materials can perform a unique and important function in education.

a. We can get materials tailor-made to local needs. We can show traffic hazards in our own town, the police department with which our children have daily contact, erosion which is going on in their own fields.

b. The activities involved in pupil-production of visual materials can in themselves have a significant educative effect. For example, pupils in the upper Arlington (Columbus, Ohio) school, in order to make a film on bicycle safety, wrote numerous letters to safety organizations, interviewed their parents, the police and other students regarding safety riding, posted observers around the neighborhood, and enlisted the cooperation of the local newspaper. In the same way, the making of a series of hand-made glass slides or 2 x 2 slides could act as a center for learning activities.

c. The production of visual materials, especially films, has real possibilities as a school-community project. At Dover, Ohio, for example, the making of a safety film involved not only the large high school but also the mayor, the police, the fire department, a local newspaper, a local hospital and numerous local businesses. Safety, slum-clearance, recreation, sanitation, fire and police protection and the like are of interest to both students and parents. A film-production project can bring together child and adult in a situation where both recognize the value of cooperation.

The Visual Aids We Have for Defense Education

BLAKE COCHRAN
Teachers College
Columbia University

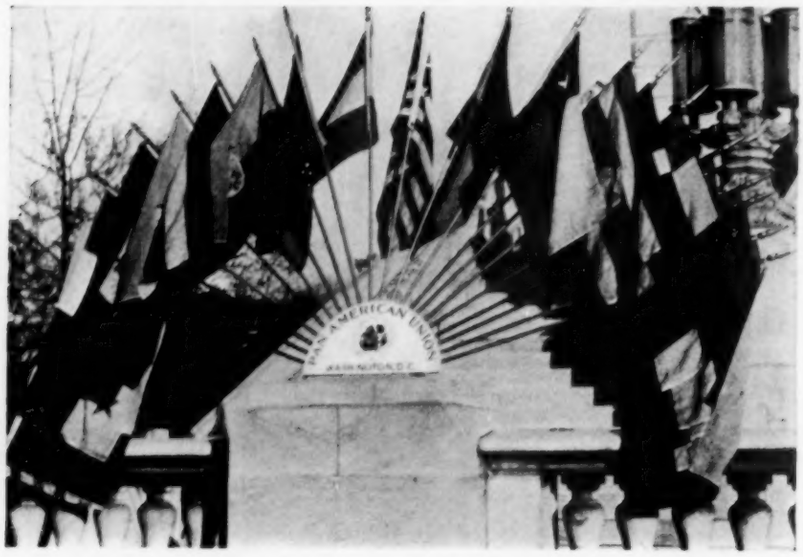
DURING the past few months there have been several statements made concerning the relationship of education to defense. The Educational Policies Commission reported that "the imperatives of National defense are military, economic and moral." They also stressed the necessity for an understanding of the nature and goals of democracy. This broad interpretation of the program of defense education means that the best visual aids in defense are not, for the most part, those which have been whipped together since the fall of France, but those which have been in most of our good libraries for many months. If defense means a better understanding of democracy, increased economic efficiency, better health, and a growing appreciation of what we have to defend, then we have visual aids which can be used for defense education.

With this interpretation of the topic, it is obviously impossible to enumerate all of the visual materials which could be used. Therefore, I propose to suggest several areas of defense education in which visual aids exist and may be profitably used. Films are used most often as examples, since I am most familiar with film materials. The films listed are given as illustrations only; there are, no doubt, many others which are equally as good.

First, there is the task, suggested by the Educational Policies Commission, of morale, which includes an understanding of, and a deep loyalty to our democratic institutions and ideals. For this purpose there are such films as *The Perfect Tribute, Servant of the People, Declaration of Independence,* and other of the historical shorts which are now available through Teaching Films Custodians. *George Washington: His Life and Times* (Eastman), and *Early Settlers of New England* (Erpi) as well as the Yale *Chronicles of America* can be used in this connection. 1938: *A Year of Contrasts* (Films Incorporated), though in need of some revision in light of changing events, gives a modern application of some of our historic ideals of democracy. For calling attention to some of the tasks which remain in perfecting democracy, such films as *The Merit System Advances* (Municipal Civil Service Commission) could be used.

A *second* area in which visual material may make a contribution to defense education, is in developing a better understanding of America, its land and its people. We are most willing to defend those things which we know and understand. America will be safer when youths of New York City know something of the Kansas wheat farms; when the people of the cotton fields of Alabama know more about the people of the coal mines of Pennsylvania; and when youths of the rural West understand something of life in Chicago and Washington. We have been attempting to do this for years in social studies and geography, but we must intensify our efforts. The world as it is today makes it more important than ever before that we feel the unity which comes from knowing more about each other. Such films as *The River* (U. S. Dept. of Agriculture), *The Corn Farmer* (Erpi), and *The City* (College Film Center), and many others, can be used for this purpose.

A *third* consideration in defense is our relation with our neighbors of this hemisphere. Just as a better understanding of our own country may contribute to our national strength, so a better understanding of the countries of this hemisphere may contribute to our



Flag assembly of Pan-American republics, from "The Last Stronghold."

Hitler and Mussolini reviewing troops in "Germany Invades Austria."

Scene in an airplane plant, from the film "How to Make an Airplane Part."

mutual defense against foreign aggression. There are military aspects of these relations, but equally as important are the economic and cultural. The American Film Center prepared a "Latin American Supplement" listing many of the films in that area. The Eastman silent films on Mexico, and Central and South America are familiar to most of us. Erpi has recently released five films dealing with different aspects of South American life. A number of good films may be obtained through the Pan American Union. Films dealing with Canada should also be useful in this connection.

A *fourth* aspect of defense is the building of a knowledge and understanding of what has happened and is happening in Europe. Without this background, we cannot proceed on an intelligent program of the defense of America, for we would not know what we were defending *against.* This is the subject of the American Council on Education's publication, *Films on War and American Policy.* Such films as *The Expansion of Germany* (Visual Library), *The League of Nations* (March of Time), *Germany Invades Austria* (Castle Films), and *Inside Nazi Germany* (March of Time), and *The Last Stronghold* (Films, Inc.) may be of great value in giving this understanding and background. Many films related to this topic have been and are being made available. Such materials should do more than tell of the horrors of war—they should contribute to an understanding and appraisal of the forces in conflict. In the use of the film in this area, it is particularly desirable that they should be used critically and with a sense of sequence.

A *fifth* area is health. We seem to be at about the same point in our thinking here as England was at the time *Enough to Eat* (Museum of Modern Art Film Library) was made. We are hearing of large numbers of army rejections for physical defects. The films which we have on health are just as useful as they ever were, but they need to be used more and better. The films of the National Tuberculosis Association, Social Hygiene Association, and the United States Public Health Service, along with the familiar film on human physiology, can all be thought of as useful in defense health education.

A *sixth* area deals with economic and military defense. Here the films vary from those giving a broad overview to those which are designed to do a specific job. For example, *The Machine Tool Maker* (Erpi) can give an appreciation of the importance of that worker and an impression of how he works, but it will be of very limited value in teaching exactly how to run a lathe. *Conquest of the Air* (Films Incorporated) fulfills a quite different need from *How to Make an Airplane Part* (Gutlohn), or *Principles of Flight* (Eastman). The United States Maritime Commission's film, *Ships and Men,* can give an idea of the effort which is being made to provide America with an adequate number of merchant ships manned by competent crews. Films dealing specifically with military and industrial training problems

are being made by the Federal Government. However, any film which deals effectively with the wise use of our resources and man power is potentially useful for developing an understanding of economic defense.

Dr. Francis Brown, in reporting at a Washington meeting on the defense activities of American Colleges and Universities, said that over 200 such institutions have committees on defense education. Such committees should be willing to work with directors of visual education in making a survey of the visual materials useful for National defense which are available, or can be made available, within the area in which the school or college is located. Materials might be selected around some such headings as have been suggested in this report. In this way the films and other visual materials in the libraries of this country might be classified in terms of their contribution to national defense. The committees could make specific suggestions as to the adaptation and use of these materials. Particular attention could be given to the problem of sequence. A helter-skelter use of films cannot contribute to an orderly development of a topic nor result in clear understanding and thinking. Such a service—selection and adaptation of visual materials for defense education—would call attention to many materials which are now being overlooked, and would contribute to their effective use. Bulletins and pamphlets could be issued making the results of the study available to teachers. In addition to our regular school groups, we must think of the adult groups which are interested in national defense and anxious to get material which will be useful to them. A well-organized series of visual materials could become the basis of the curriculum for such a group.

In a discussion on the Town Meeting radio program of a few weeks ago, Dr. Dykstra, Director of the Selective Service System, said, "I hope it is going to be possible for the Army to teach the schools the art of visual education." It may not be necessary for us to learn the art of visual education from the army but this emergency may give us an opportunity to do some of the things we have been wanting to do for a long time. If we can get groups of educators to think in terms of specific visual materials to do a specific educational job, we may be able to demolish the idea that visual aids are educational tidbits, and get them to see that visual materials can be a substantial and vital part of the educational program.

Free Materials — a Blessing or a Blight for Education?

A Symposium of Opinions

EDGAR DALE, Chairman

Introductory Remarks

O. H. COELLN
Editor, Business Screen, Chicago

MY place as the first speaker in this forum seems to pre-destine me to the task of defining a subject as formidable as the blind man's elephant. That there is the faintest suggestion that this animal is a near-relative of the Trojan horse is suggested by the question "are these free materials a blessing or a blight for education?" That would seem to put me in the unenviable position of defending something quite unworthy of defense or possibly of praising those who have not asked for it.

The plain unvarnished truth is that there is no organized effort of any kind on the part of business which today seeks to contribute unworthy film materials to the schools. There are plenty of so-called commercials in your film libraries. A very large proportion of your really worthwhile educational materials can be traced back to commercial sponsors—most of them supplied at the school's own request—used with great effectiveness over a period of years—and a good many long since forgotten by their original donors. That there are frequent examples of misuse of many other kinds of commercial films is as apparent to business as it is to you who have pioneered the cause of visual instruction. Many factors contribute to this, not the least of which is the inadequacy of purely educational materials. It is with no little surprise that the sponsor of a film intended solely for the improvement of his own salesmen receives a request for school showing. I can say to you with all truth and sincerity that the ulterior motives of the greatest part of big business are founded in nothing more than the attitude they take toward encouraging student trips through their factories. With some this is one of the traditions of industrial leadership, with others a genuine social-mindedness exists.

What you and I are interested in discovering and defining is the first half of your question—where, if anywhere, are the free materials that are a blessing? You have a responsibility here that is as great as that of business. You can help to establish criteria that will enable those who follow your guidance to shut out unsatisfactory materials. And you can, through understanding and cooperative effort, encourage the production and editing of materials that will help bring to the classrooms of America a true picture of a nation at work, a true conception of the jobs which those you teach today will fill tomorrow, a better understanding of the whole panorama of our democracy at work. You can do this and we can help—and the results of our efforts will not only improve many existing situations but they will enable education to reach that goal of wholly independent action.

Listen for a moment to the pulse of America—in the industrial centers of the country, the hammers and the lathes, the beating and turning of both the ploughshare and the sword. Today our nation's defense demands an increased program of technical education, a thorough understanding, by those who will man the machines, of the nation's economic and mechanical resources. At such a time when the production lines of American industry constitute the first line of our nation's defenses, it is vital that we utilize every efficient means at hand to help the

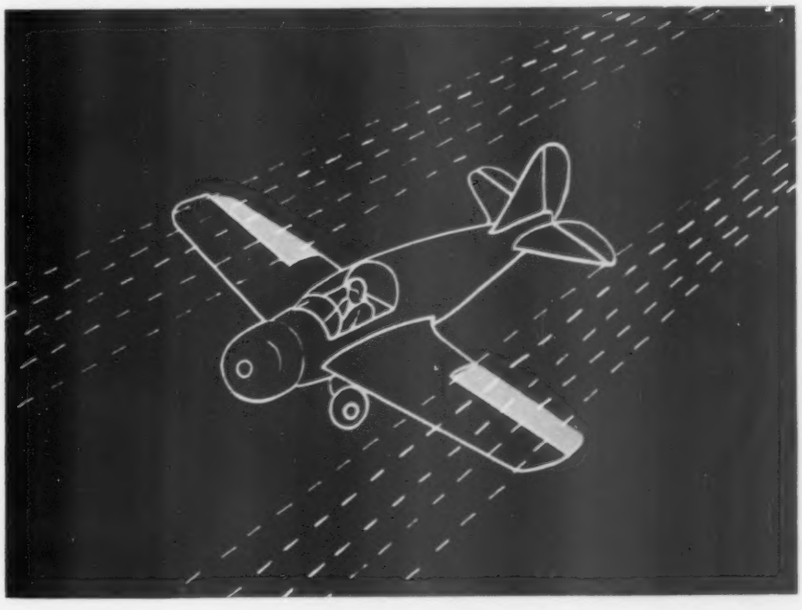


Diagram illustrating function of ailerons in "Principles of Flight."

schools in achieving their part in this program of preparation and production.

Business Screen is proud of its often-stated policy of demanding higher standards of industry's film material when it is intended for use by schools. Not our efforts but those of industry who have observed this criterion are worthy of praise and mention. The widespread use of such films as *Alaska's Silver Millions,* of various safety subjects such as Metropolitan's *Once Upon a Time,* of industrial productions such as RCA's recent films and those of Steel, General Motors, Western Electric, General Electric and a lengthy list of others. Many of these possess fine qualities of technical perfection, little advertising beyond a credit line, and they far outnumber the occasionally bad subjects with too large a proportion of advertising, an insincere message or general technical imperfection.

Let us together seek out and evaluate those which are best, set them up together with standards of suggested improvement. Business will not seek you out. But you can take what you need from it and you can thus set up a common sense program that will make a real contribution to the present problem. We will help wherever we can in such an evaluation and we can do so free and unfettered. There is potential negative material for a hundred vocational and technical guidance films available to you, use and extend the use of films that yourselves can determine as worthwhile and this discussion will have real significance to the cause of visual education everywhere.

My definition of the subject agrees with the one Godfrey Elliot proposed in an article we have scheduled for early publication, "the first thing the school is looking for is good factual films. The mere offer of a "free" industrial film no longer intrigues the school user; there must be something in that film that will make a definite contribution to the school's objectives, as well as meeting some well-defined standards of construction, photography, and editing."

It also agrees with Cline Koon's statement that "where the subject matter is ably and objectively covered, without any hawking of trademarks or other advertising, such films may be used to advantage."

We who are gathered here work together with the practical result of increasing the amount of truly educational materials that will make possible the number of projectors in use and thus arrive at the goal toward which all of us truly strive — enough equipment in use to justify the uninterrupted production of the finest educational films, edited and produced according to the highest educational standards. Let every phase of the situation serve to aid you toward that goal.

Safety Procedure in Grinding an Axe

BOYD B. RAKESTRAW

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WE ALL realize, we all have realized for years, we are all expected to realize, that every time we use a free film, other than those produced and distributed from endowed educational sources, we are grinding somebody's axe. Before proceeding further in this discussion of "Free Materials, A Blessing Or A Blight For Education," let me make it clear that I think axe grinding, conducted in a union shop under fair labor conditions, is excellent employment. But I am equally concerned that I don't work overtime at an advertiser's grindstone.

It is a truism to say that "We-e-e-ell, there are many points to be considered in regard to free materials." Of course there are many points to be considered; all of us have an individual list of them. But, looking at the field broadly, let's survey a few of these points which are in favor of this type of film.

We know that the business film, the advertising film, or "free" film has certain advantages. Such films are beautifully produced, possibly because industrial films can put more money into a film that *sells* than educational concerns can put into a film that *teaches.* We know that such films usually show excellent workmanship and technique; that they make available instruction materials which might not ordinarily reach the screen; that they provide an insight into operations, production methods, and general procedure of business and industry. We know that these films provide excellent materials for social studies and for vocational guidance and bring a knowledge of the industrial sector of our economy to students, and we know that right now, when national unity is a keynoted challenge to us all, such knowledge can well become essential in our everyday decisions. Lastly and crassly, we know that these films are available for small fees, or for no fee at all.

If I stopped at this point, and if you were lay men-and-women, I would expect an immediate chorus of "Well, now, isn't that fine!" And if I could stop at this point, I myself would be inclined to join you. It is to both your loss and mine that I must continue.

For these films, naturally enough, were not designed for classroom use. They do not fulfill the entire function of educational films. They are appendages but not vitals of the visual system. They require *teaching* rather than *projection* to a class, and *teaching* is all too rare in this connection, as yet. Without this teaching, they provide the student with distorted values, one-sided viewpoints, and readymade propaganda.

But we are grinding axes today, in the visual field. It is necessary and valuable that we grind axes, for the advantages of such films are evident if we can perfect the edge for our use, if we can get the nicks out of our axe blade. Now grinding an axe involves, besides the axe, a sure touch, a grindstone, and a set of safety rules. Today we have all these things in visual education—except a safety procedure. Is it too much to expect that we can evolve this?

To my mind we might start with the "free" part of the materials. It is my personal conviction that this feature has proved more of a retarding factor to visual instruction, and to the advertiser himself, than it has proved a stimulant. In our state we have a crusty old school principal who will use nothing but these free films. Why, he asks smugly at visual conferences, should he spend money for films when he can get them for nothing. I had a chance to see one of his presentations not so long ago, not such a bad film either; but as I was waiting outside the door as the students came in, I was amused to hear one of them say, "I wonder what old So-and-So is going to try to sell us today.

Now, to eliminate this evil of unadulterated animated advertising, it seems to me that education can be served best and at very small expense if we who are interested in visual instruction would establish through our national organizations a committee on cooperation with producers of such films. This committee could secure at cost a print of the film in question, circulate it to a number of members and secure their recommendations on its value, its probable value if certain sections were deleted, its overall possibilities as a teaching medium.

At this point, and with a set of concrete recommendations, the committee could approach the firm and attempt to arrange terms of sale for distribution of prints on this basis. In discussion the points recommended by member-libraries could be taken up one by one and a mutual agreement reached. Visual instruction would thus gain a valuable teaching tool. The cost? It consists of the price of prints, if not donated, the cost of cutting and re-editing, the cost of distribution. If handled properly it would amount to not more than twenty cents per rental day.

But, you ask, will the producer of the film agree to this? Because it has never been tried on this basis, the basis of fair consultation and mutual agreement, there can be no answer, but it seems to me reasonable that he would. What does he lose? In the long run your producer loses nothing, for through increased distribution, by allowing his film to be made into a useful teaching medium, he has secured a wider audience than he could have reached before. And in this method of handling the problem, all credit is given where credit is due. The only difference is that we keep our students from wondering "what old So-and-So is going to sell us today," and substitute for them an interesting and instructive record of importance to their education.

Another step in our safety procedure is a bridge in a long time program. It necessitates undertaking a study of the appeals used by the producers of the type of film we are discussing today, and making the results of that study available to every user of visual aids. Such a study, perhaps on the order of those of the Institute of Propaganda Analysis, with which we are all familiar, would make it possible for the individual teacher to evaluate properly, to make a thorough presentation of the individual films projected in the classroom, and to prepare a presentation of all sides of whatever situation, or process, was under discussion.

The last safety factor I have to mention is the most effective, the most necessary. It is a matter of long-time effort, a matter of vital importance not only in this regard, but in connection with the entire visual movement. Teacher training! For too long we have sat and watched the field of visual instruction "develop," if such it can be called, in the hands of amateurs who feel that, with modern equipment, all that is necessary is that one press the switch, the pictures do the rest. Visual instruction is a *method* of instruction which necessitates specialized training in much the same manner as does coaching athletics. But how many courses are available in physical education in our universities today; and how many courses are available to teachers interested in visual methods of teaching? True, there has been some small beginning; among other institutions our University of California has made a start in this regard, and last summer we were fortunate enough to have today's chairman on our staff. Results, it cannot be emphasized too strongly, have already proved the value of such training. Indeed, one of our former student teachers has written me that her attendance on Mr. Dale's courses has given her great concern for she is so much in demand for presentation of visual media in all classes in her high school that she feels she is neglecting her own field of economics. Probably she is right, but the day must come when every teacher is able to teach with motion pictures as an aid to modern curriculum procedure. Not that motion pictures will ever replace the teacher in the classroom, but the acquiring of the technique of visual instruction will make the teacher's abilities more valuable.

With such trained teachers we may feel confident that films will be presented to students fairly, adequately, and without sugared pills of promotion stressed beyond proportion. With the teacher in the individual school, conversant with the individual locality, and knowing the individual problem which the visual method must clarify, rests the beginning and the end of safety procedure in grinding an axe, whether it be the axe of industrial promotion, of personal ambition, of political theories, or of "isms" versus Democracy.

In Defense of the "Free" Film

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Mercer County Schools,
Oakvale, W. Va.

ANY defense of the free film must begin with the frank admission that offenders do exist in the field. However, let us temper any such indictment by remembering that some of our commercially produced classroom films have faults that, although not necessarily similar, are just as serious in their educational implications.

As a local problem the school either uses or does not use the free film; as a national problem the school, regardless of its local policies, must give consideration to the free film, what it means now, and what it is likely to mean in the future. There is little point in shutting our minds to the realities of the situation. The free film is here, it is being used in hundreds of schools, and new sponsors are adding films every day. Until the classroom type film is as easily and as cheaply obtained by the average school, just that long will the free film continue to be used. Bar the free film from your local school if you wish, but the problem still exists.

What are the objections to the free film? One school administrator damns all free films because their school use constitutes unauthorized advertising. Another school official bars free films because they may carry undesirable propaganda. In still another instance a principal refuses showing to free films because, in his words, "the sponsors aren't doing this for their health". Before we accept any such indictments as final, let's examine them more closely.

Carrying undeserved weight among the complaints against free films is the accusation of being a propaganda agent. (Propaganda has a much more sinister sound than advertising.) It is a charge most often leveled at films sponsored by trade organizations and special interest groups, especially if there is any hint of foreign origin.

The average public school is a little confused by such charges. It is accustomed to using the free film as an important part of its visual aids program. It has found that much of this so-called propaganda is no more than an author's point of view. Its experience has shown that much of the film's propaganda, if it does carry a special bias, is lost upon the student. The school has learned that there is no serious complaint when it applies to the free film the same standards used in selecting and showing a classroom film.

The most frequent charge against the free film is its advertising. To be sure, there is advertising in free films, but what of it? Would these same accusers remove the newspapers and periodicals from the school library shelves because they carry advertising? There would be an immediate justification for condemning the free film on grounds of advertising if the school used the films of one sponsor to the exclusion of all others.

What constitutes objectionable advertising in free films? Are all free films to be barred from the school merely because a few sponsors have been offenders?

Who says that propaganda in free films is harmful to students? Upon what evidence can we state that free films have the power, through the student, to influence the purchasing policies of the family?

Isn't much of this predicated upon personal opinion which has resulted from the film's impact on our adult prejudices? Do we possess objective evidence to support any of the charges made against the free film? I, for one, say that the problem is important enough to warrant objective evaluation before we assume any hands-off attitude.

Regardless of what we may say against the free film, there is much to recommend it for favorable consideration. The school owes much to the free film and its sponsors.

The free film's producers and sponsors have been responsible for much of the progress in the sub-standard field. Improvements in film stock and projectors have come about largely through the free film. Few of our 16mm equipment manufacturers could exist on school business alone, and they could never have reached their present performance peak through school sales alone.

The free film has provided film learning opportunities in fields that are not entered by the commercial classroom film, in addition to enriching and extending other areas.

The free film has made its greatest contribution by helping to popularize the educational use of motion pictures. It has helped hundreds of schools get a program started. The typical school user of films purchased a projector through local effort, then turned to the free film field to carry on the program until the school could find the money necessary for the rental and purchase of classroom films.

Much of the complaint against the free film is justified on the basis of those films whose sponsors never intended that they should be circulated to schools, sponsors who never invited school use but had it thrust upon them by schools who did not choose their free films as wisely as they would had they been compelled to pay rentals on them. To the credit of the sponsor who invites school circulation of his free film it must be said that he also invites cooperation in improving his film product.

Here, at the point of origin, is the place to start work on this problem. If the sponsor is sincere in wanting school circulation for his films, then provide the opportunity for him to secure school advice, school opinion, and competent, common-sense criticism. Where can he

learn whether the film treatment he plans will be acceptable for school use? Who will tell him that the 45-minute film he plans should be cut to 20 minutes? If he wants information, let's provide the source to which he can apply.

Some Suggestions for Improving Free Material

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John D. Pierce Jr. High School
Grosse Pointe, Michigan

THE typical efficient teacher gives much time to the careful planning of classroom work. Consideration is given to special techniques in the learning process, economy of classroom time, selection of worthwhile pupil experiences, etc. Certainly the teacher has the right to expect certain standards in any visual materials brought into the classroom.

Free films have gained preferential entrance to many schools because they have been well advertised, they cover special subjects, and they cost less. A few years ago, when the writer's experience in the visual field began, they constituted the main stock available outside of the DeVry and Eastman classroom teaching films. At that time we accepted them without question as a blessing. Only since we are now gaining a better supply of specially made educational films are we securing better comparative standards on which to judge the real quality of the free stock.

Teachers can find faults in all films brought into the classroom for no combination of pictures and description prepared in advance can fit classroom needs perfectly. We can only say that certain faults do appear more frequently in the free stock although there are many exceptions. Much depends upon the teacher's own carefulness in selection, previewing, and general use.

The most frequently mentioned shortcomings seem to be the following:

(1) Free films tend to be theatrical in make-up and presentation. They give preference to the spectacular rather than the true.

(2) The films tend to be a collection of scenes not too carefully selected and bound together loosely by titles or voice description. Proper sequential arrangement of materials is frequently lacking.

(3) Films produced by single concerns fail to present the full scope of the subject.

(4) The photography contains a poor balance of distant and close-up shots in the ratio needed for student understanding.

(5) Undue portions of the film are frequently given to sales interests of the products or services.

(6) Certain school subject areas, such as science and geography, are more completely covered than others.

(7) The running description in word or voice form is not always the best. This is frequently overdone. The visual action of the film should be so meaningful that the running description may be supplementary.

(8) Teachers' guides are not usually provided.

(9) Booking conditions are more uncertain. Some concerns are very lax in notifying teachers of arrangements and in sending material on time.

(10) Films reach teachers in poorer condition.

(11) Unbiased "consumers guides" are generally lacking. Teachers have to rely on the word of the producer as to the possible usefulness of the film for the classroom.

Teachers usually sample free films in their first use of film materials. This introduction has frequently been none too satisfying and has resulted in attitudes against the further use of visual aids of this form. Such reactions have tended to discourage the general spread of use of all educational film and to lesson the amount of money made available for visual aids.

Many schools make use of numbers of free educational films for general auditorium programs or noon hour showings. They do this without previewing the films or providing for any effective correlation with classroom activities. Students learn to judge such films for their entertainment qualities when such random use is made. Such presentations make it extremely difficult for teachers to get the best response from good educational films in the classroom. Furthermore, it leads teachers to the improper use of such materials.

Concerns providing free materials do so with the hope that the contributions will be a blessing to Education. Schools can help to make these productions more useful. Teachers must not stop short with criticism alone. Here are a few suggestions on what could be done:

(1) Teachers could make a survey of the films needed and prepare such a list for all interests wanting to provide free materials.

(2) Teachers could specify certain standards for educational films in general. These standards could apply to techniques in the makeup and content as well as photography.

(3) Producing interests could employ qualified educators who would have direct control on the subject content of the films.

(4) Teachers' guides could be made available.

(5) Films could be deposited in central distributing units in a proportion of at least one to a state. These units could be empowered to provide estimates of the quality of the films and to provide care and booking arrangements.

(6) Teachers could provide rating scales of their own on such films.

With all the criticism that is given to free visual materials the word "blight" could be avoided. The blight could at least be turned into a blessing. But until teachers declare themselves on what they want and until schools offer more actual assistance in production, the quality of free materials will continue to fit standards set by the present producers.

Looking the Gift Horse in the Mouth

WILLIAM H. HARTLEY
State Teachers College, Paterson, N. J.

JEROME, a writer of the fourth century, when some found fault with certain of his words, replied that they were free-will offerings, and that it did not behoove his readers to look a gift horse in the mouth. The modern teacher to whom a goodly number of gift horses has been offered has found it necessary not only to look them in the mouth, but to make a thorough examination of the entire animal to make sure that it is a horse and also to make doubly sure it is not a Trojan horse from which might emerge enemies to efficient and honest education. To aid in this examination of the true nature and structure *of the above mentioned beasts*, I respectfully present the following ten criteria for the evaluation of "free" materials.

1. *Would this material be just as welcome and as useable if it were necessary to purchase it with the money of the taxpayers who support our public schools?* In listing "free" materials I am inclined always to put quotation marks around the word "free". We pay a price for everything we get and use. Too often the materials we get for use in schools are not worth the price we pay for them. In the case of free materials we pay the price of cooperation with an advertiser or propagandist in presenting his ideas to our children in the name of education. Is the material in question worth the price we must pay for it? Would it still be desirable if it were necessary to pay for it at the usual commercial rates?

2. *Does this material serve objectives worthy of a place in a public tax-supported school?* The many charts on soil conservation obtainable from the United States Department of Agriculture are welcomed by teachers because they help to guide pupils toward objectives which most agree to be worth while. Can we say as much concerning the materials urged upon the schools by patent medicine firms? To attain worthwhile goals we must utilize worthwhile materials.

3. *Do the educational aspects of the material predominate or are they incidental to propaganda?* All of us no doubt have seen free films many reels in length in which there was less than a hundred feet of material which could be classified as educational in the sense that it contributed to the lessons which we wished to teach. Time after time it has been my disappointing experience to order material which the producer recommended as being educational only

to find it to be a glorified sales talk with but a smattering of usable material. Did I use it? Get thee behind me temptation and help me to send it back after the preview rather than present it to my class simply because I have it on hand.

4. *Is the material accurate in detail, honest in its implications, and straightforward in the manner in which it presents useful information?* If the best possible materials are to be utilized by the classroom teacher, exacting and stringent tests must be applied to them. Simply because this material is available free or at low cost is no reason why it should be exempt from minute examination. Indeed, if the teacher is to avoid lending himself to questionable enterprises such examination *must* be made.

5. *Does the material definitely correlate with the course of study on the grade level for which it is being considered?* There is, to be sure, a place at any level in the school curriculum for enrichment material, often not directly related with the study at hand. In selecting this and more directly related material it should prove helpful to examine it in the light of the background, needs and abilities of the group to whom it is to be presented.

6. *Does the material measure up to the high technical standards which should be constantly maintained in our classroom?* Too often free material meets this criterion to perfection yet fails in other important respects. With the great resources at his command the advertiser prepares his material with great care and presents it with an artistic flourish impossible to the producer who must satisfy limited school budgets. This criterion should not be overlooked but it should not be allowed to outweigh more important considerations.

7. *Does the material tell its story in a simple, straightforward, courteous manner, free from objectionable and blatant advertising?* It is true that our ears have become somewhat hardened to sales talk because of the great amount of it which we hear over the radio, but it cheapens education if we bring this type of material into the classroom. True, if the class is studying propaganda analysis, then there is a place for propaganda in the classroom, but if the class is studying transportation it is discouraging to have the lesson interrupted at regular intervals while some smooth-tongued individual extols the advantages of a particular brand of motor oil.

8. *Will the use of this material stimulate pupils to further desirable activity?* If a free chart will foster better health habits in a child, then it contributes to the educational process; but if the principal result is a feverish contest to determine how many wrappers of a particular brand of soap may be collected in a given length of time, then the use of this material is questionable.

9. *Are the motives which prompted the advertiser to furnish this material to the schools such as to invite cooperation of the school authorities?* I grant that it is sometimes difficult to determine the exact motives which prompt an advertiser to furnish materials to the schools, consequently, like certain modern Romans the teacher must "beware of Greeks bearing gifts."

10. *Finally, is this the best material available for the teaching of the topic under consideration?* The question is not as to whether this material is *most* available or easiest to obtain but whether this is the *best* material which the teacher may procure. Our ultimate aim should be to seek the best materials possible in illustrating the lessons which we wish to teach. If it appears after critical examination that the "free" material is the best available then by all means utilize it and be thankful for its accessibility.

A Free Film Survey

DONALD W. SMITH
Extension Service
University of New Hampshire

I HAVE been asked by President Reed to present a summary of pertinent data obtained from a recent survey of school-film libraries in regard to free industrial films. I am greatly indebted to Mr. Chester Tibbetts of the University of Pennsylvania for permission to use much of the material.

It is logical that at this early date there exist many conflicting ideas among educators in regard to the merit of using industrial films as part of the educational program. Some educators are in favor of a strong "hands off" policy backed by legislation forbidding the use of any free industrial materials in the classroom. They that believe, for one reason or another, that all industrial films are objectionable are decidedly in the minority, however. The trend does not seem to indicate that industrial films are being discarded altogether. The majority of us favor encouragement of industrial film production planned for use in our schools.

Our survey, to which I shall confine my remarks today, included 60 institutional film libraries all over the country. We had an 82 per cent return.

Indicative of the present trend that teachers are using industrial films, 44 of the 49 libraries answering reported distribution of industrial subjects. Every one of the 49 replies indicated that not every industrial film would be accepted for circulation. While most libraries pointed out they have their own criteria for judging industrial films, these can be classified somewhat. I will enumerate indicated standards for acceptance at the end of this report.

We asked each library to list two industrial films which merit their use educationally. Many libraries listed with ease a considerable number of good industrial films. I have with me a list of fifty industrial films highly recommended for use educationally. It is interesting to note that the film *Alaska's Silver Millions* was included on 47 per cent of the returns. Perhaps the reason for this is the leniency of the sponsor and producer in placing many prints at the disposal of our libraries; and yet, I think that this film must fulfill to a large extent the criteria with which most of us judge an educational film.

The number of industrial subjects in any given library ranged from zero to 500. This figure includes reels, prints, and government films.

Approximately 20 per cent of the 47 libraries reporting stated their individual libraries consisted of over fifty per cent industrial films. There seemed to be a trend for the smaller libraries to depend largely upon industrial films for volume.

In the main, industrially sponsored films in school film libraries are advertised through annual publications of 44 different schools sent to 44 different mailing lists. Eighteen publications mention the sponsors, 26 catalogues do not mention the sponsors. All 45 libraries answering expressed (on the questionnaires, at least) a willingness to send reports-of-showings to the sponsor. The majority prefer to send these reports quarterly or monthly, with a slight edge on the side of quarterly reports. I should say that most libraries would send reports as desired. While detailed attendance reports require considerable time and clerical assistance, they enable us to determine better the educational effectiveness of each and every film and if we are not interested in the effectiveness of a particular object, then most certainly we should not engage in its distribution.

Last but by no means least, are the standards or criteria for evaluating industrial films. Many libraries have given these much thought and list the following points to be observed in the selection and use of free films. I shall list these in the order of relative weight given to each.

Foremost, *the film must be free from objectionable or offensive advertising.* All agree that the name of the producer and sponsor at the beginning or end of the picture, is not to be construed as objectionable. The amount of advertising that we as teachers and laymen will permit depends upon many factors. Some have said they will permit no direct advertising, while others feel that it is the indirect advertising that is objectionable.

Secondly, *the film must have educational value.* It must meet curricular needs. It must be used at the proper grade level. The material must be true, interesting, and up-to-date.

Thirdly, *the film must be previewed by the library administrator and his staff* before being placed in the library *and again carefully previewed by the teacher* before use in the classroom.

It is felt that industrial films require as much, if not more, advance preparation on the part of the teacher as do teaching films. The majority of industrials do not have teacher's guides, although there is a trend for these to be prepared and issued as new productions are released.

(*Concluded on page* 172)

Summer Courses in Visual and Audio-Visual Instruction, 1941

Compiled in Co-operation with The Society for Visual Education

The following courses have been reported to date. Figures in parenthesis show credit hours. An additional list will appear in May.

Alabama

Alabama Polytechnic Institute School of Education, Auburn — June 2-July 10
Audio-Visual Education (3) — M. L. Beck

Arizona

Arizona State Teachers College, Flagstaff — June 9-July 11
Audio-Visual Education (39 hrs.) — W. T. Machan
Arizona State Teachers College, Tempe — June 9-July 12
Visual Aids in Education (2) — L. D. Payne
University of Arizona, Tucson — June 9-Aug. 16
Visual & Auditory Aids in Teaching — E. L. Larson

Arkansas

State Teachers College, Conway — June 8-Aug. 13
Techniques in Visual Education (2) — H. L. Minton
University of Arkansas, Fayetteville — June 12-Aug. 29
Use of Audio Visual Aids in Teach. (1) — Robert S. Sackett
Audio-Visual Education (2) — Robert S. Sackett

California

University of California, Los Angeles — June 30-Aug. 8
Audio-Visual Aids in Education (2) — Fred. W. Orth
Educational Films (2) — Fred W. Orth
Administration of Audio-Visual Aids in Education (2) — Fred W. Orth
University of Southern California, Los Angeles — June 28-Aug. 7
Intro. to Audio-Visual Education (2) — F. W. Noel
Workshop in Audio-Visual Ed. (2) — Mrs. Goudy & Noel
Educ. Use and Appreciation of Films (2) — F. W. Noel

Colorado

Colorado State College of Education, Greeley — June 16-Aug. 8
Visual Aids in Education (4) — James D. Finn
Production of Visual Materials (4) — James D. Finn, H. Walton and Robert Shreve
University of Colorado, Boulder — June 16-July 18
Education through Motion Pictures (3 qu.) — Lelia Trolinger
Visual Aids (3 qu.) — Lelia Trolinger

Delaware

University of Delaware, Newark — June 23-Aug. 1
Visual Education (2) — Emma Ehlers

Georgia

State College for Women, Milledgeville — June 12-July 18
Visual Aids to Education (3-1/3) — Ethel Parrish

Illinois

Northwestern University, Evanston — June 23-Aug. 16
Visual Aids & Radio in Education (3) — J. S. McIntosh
State Normal University, Normal — June 10-Aug. 6
Audio-Visual Education (3) — Clarence Cross
University of Chicago, Chicago — June 23-Aug. 28
Auditory & Visual Instruction (3-1/3 hrs.) — Edgar Dale
University of Illinois, Urbana — June 16-Aug. 9
Audio-Visual Aids in Education (3) — Louis Astell
Western State Teachers College, Macomb — June 9-July 18
Visual Education (4) — Alvin B. Roberts

Indiana

Butler University, Indianapolis — June 10-Aug. 2
Visual Education (3) — H. A. Henderson
Visual Education (Advanced) (3) — H. A. Henderson
Indiana University, Bloomington — June 10-Aug. 6
Visual Education (2½) — L. C. Larson
Indiana State Teachers College, Terre Haute — June 9-Aug. 1
Visual Education (4) — Mr. Ramsey

Iowa

Iowa State Teachers College, Cedar Falls — June 4-Aug. 21
Visual Education (1) — H. A. Biebe
State University, Iowa City — June 9-Aug. 1
Visual Education (3) — Donald McCavick

Kansas

Municipal University, Wichita — June 9-Aug. 1
Visual-Sensory Aids in Teaching (3) — W. A. Bonwell
University of Kansas, Lawrence — June 11-Aug. 6
Visual Ed. in Elem. & Sec. Schools (2) — H. S. Montgomery

Kentucky

University of Kentucky, Lexington — June 16-July 19
1st term—Motion Pictures in Ed. (3) — Gayle Starnes
2nd term—Audio-Visual Aids (3) — July 21-Aug. 23 Louis Clifton

Louisiana

Louisiana Polytechnic Institute, Ruston — June 2-Aug. 2
Use of Audio-Visual Aids in Classroom (3) — R. H. Mount
Southwestern Louisiana Institute, Lafayette — June 5-Aug. 15
Visual Educ. in Primary Grades (3) — G. A. Zernott
State University, Baton Rouge — July 7-July 25
Audio-Visual Short Course (3) — C. C. Henson and Harley Smith

Maine

Bates College, Lewiston — July 7-Aug. 15
Audio-Visual Education (2) — E. Carleton Moore
University of Maine, Orono — July 7-Aug. 15
Visual Education (2) — Paul S. Miller

Maryland

University of Maryland, College Park — June 23-Aug. 1
Visual Education (2) — Henry Brechbill

Massachusetts

Boston University, Boston — July 7-Aug. 16
Visual Methods in Nature Study (2) — Earle A. Brooks
The Use and Management of Visual Aids in Ed. (3) — James R. Brewster
The Collection, Preparation & Projection of Teaching Aids (2) — James Barclay
Harvard University, Cambridge — July 7-Aug. 16
Principles of Teaching Audio-Visual Aids (3) — J. R. Brewster
Non-Credit Lab. Course in Audio-Visual Aids — James R. Brewster
Springfield College, Springfield — July 7-Aug. 8
Audio-Visual Aids in Education — M. J. Joslow

Michigan

Central State Teachers College, Mt. Pleasant — June 30-Aug. 8
Visual Education (2) — Verne Stockman
Michigan State Normal, Ypsilanti — June 30-Aug. 8
Visual-Auditory Aids in Education (2) — Floyd Leib
University of Michigan, Ann Arbor — June 30-Aug. 22
Visual & Auditory Education (3) — Ford L. Lemler
Seminar in Secondary School Curriculum (2) (Emphasis on Visual Materials) — Ford L. Lemler
Western State Teachers College, Kalamazoo — June 30-Aug. 8
Audio-Visual Education (2) — Ray C. Pellett

Minnesota

State Teachers College, Moorhead — July 9-July 18
Audio-Visual Aids to Education (4) — A. M. Christensen
State Teachers College, Winona — June 9-July 18
Utilization of Community Resources (4) — Alice Grannis
University of Minnesota, Minneapolis — July 28-Aug. 29
Visual Aids in Teaching (3) — Clifford P. Archer

Missouri

Central Missouri State Teachers College, Warrensburg — June 2-Aug. 7
Audio-Visual Education (2½) — Byron L. Westfall
University of Missouri, Columbia — June 16-Aug. 8
Problems in Visual Education (2) — W. C. Bicknell

Montana

State Normal College, Dillon — June 9-Aug. 8
Visual Education (2) — Paul Anderson

New Jersey

State Teachers College, Montclair — July 7-Aug. 13
Multi-sensory Aids (2) — Winifred Crawford
State Normal School, Newark — July 1-Aug. 13
Visual Aids in Education (2) — Fred Richmond
State Teachers College, Trenton — July 1-Aug. 8
Photography for Teachers (3) — Shirley M. Troxel

New Mexico

New Mexico Normal University, Las Vegas — June 9-Aug. 23
Visual Education (2) — Lloyd Miller

New York

Columbia University, New York City — July 7-Aug. 15
Audio-Visual Aids to Instruction (2) — M. R. Brunstetter
Lab. Course in Audio-Visual Instruction (2) — Etta Schneider
New York University, New York City — July 1-Aug. 8
Photographic Processes in Ed. (2) — Mr. Shaver
Lab. Course in Visual Aids (2) — Mr. Shaver
Practical Applications of Visual Aids (2) — Mr. Shaver
Visual & Auditory Materials in Social Studies (4) — Prof. Knowlton
State Teachers College, Buffalo — July 7-Aug. 15
Visual Education (2) — Alan Nicol
Syracuse University, Syracuse — July 7-Aug. 15
Visual Education (3) — Chas. T. Smith

Ohio

Kent State University, Kent — June 16-July 25
The Use of Visual Aids in Instruction (2) — Argra Ruffer
Ohio State University, Columbus — June 23-Aug. 29
Visual Instruction (3) — Lloyd Ramseyer
Ohio University, Athens — June 17-Aug. 9
Visual Education (2) — E. A. Hansen
Audio-Visual Education (2) — W. J. B. Truitt
State University, Bowling Green — June 16-Aug. 8
Audio-Visual Aids in Education (3) — B. L. Pierce
University of Cincinnati, Cincinnati — June 23-July 29
Visual Education in Elementary and Secondary Schools (2); Laboratory Workshop in Visual Education (2) — Victor Coles
Western Reserve University, Cleveland — June 23-Aug. 1
Visual Instruction (3) — Wm. M. Gregory

Oklahoma

Central State Teachers College, Edmond — June 2-July 31
Visual Education (0) — Fred H. Ives
East Central State Teachers College, Ada — June 1-Aug. 14
Visual Education (2) — W. C. Herring; O. Parker

Oregon

Oregon State College, Corvallis — June 23-Aug. 1
Construction & Use of Visual Aids (3) — George Eby
Correlation of Radio Recordings with Visual Aids (3) — George Eby
Organ. & Supervision of Visual Instruction (3) — Amo DeBernardis
Educational Cinematography (3) — Amo DeBernardis
Ed. 507 Seminar in Visual Education Methods — Aug.1-30
University of Oregon, Eugene — June 16-
Audio-Visual Aids in Education (3) — Lester Beck

Pennsylvania

Allegheny College, Meadville — July 7-18
Education S 12—Visual Instruction (2) — John A. Hollinger
Duquesne University, Pittsburgh — June 30-Aug. 8
Visual Aids (2) — Lester Pierce
Muhlenberg College, Allentown — June 30-Aug. 8
Visual Instruction (3) — John E. Trainer
State Teachers College, California — June 23-Aug. 1
Visual Education (1) — Newton Kerstetter
State Teachers College, Clarion — June 16-July 26
Visual Education (1) — D. D. Peirce
State Teachers College, East Stroudsburg — June 23-Aug. 2
Visual Education (1) — E. D. Heiss
State Teachers College, Indiana — June 16-Aug. 15
Visual Education (2) — Wilbur Emmert
State Teachers College, Lockhaven — June 23-Aug. 4
Visual Education (1) — Ruth Holes & Levi J. Ulmer
State Teachers College, Mansfield — June 23-Aug. 2
Visual Education (1) — Cyril L. Stout
State Teachers College, Millersville — June 16-July 26
Visual & Sensory Aids (1 or 2) — Milton H. Steinhauer
State Teachers College, Slippery Rock — June 16-
Visual Education (1 or 2) — A. P. Vincent and R. A. Waldron
State Teachers College, West Chester — June 23-Aug. 22
Visual Education (1) — Thomas Heim
Temple University, Philadelphia — June 30-Aug. 8
Projection Apparatus (2) — John T. Garman
Illustrative Materials (2) — John T. Garman
University of Pennsylvania, Philadelphia — June 30-Aug. 12
Visual & Sensory Techniques (2) — J. H. Minnick
Waynesburg College, Waynesburg — June 16-Aug. 15
Visual Education and Sensory Techniques (3) — C. O. Riggs

Tennessee

University of Tennessee, Knoxville — July 9-July 16
Audio-Visual Aids to Ed. (3) — P. M. Fitts
Acquisition, Care & Use of Films, Slides, Pictures, etc. (3) — Celia P. Campbell

Texas

Baylor University, Waco — June 9-Aug. 22
Audio-Visual Education (3½) — M. L. Goetting
East Texas Teachers College, Commerce — June-August
Audio-Visual Instruction (3) — W. W. Freeman
Sam Houston State College, Huntsville — June 4-Aug. 28
Administration of the Audio-Visual Aids (3) — W. E. Lowry
Southern Methodist University, Dallas — June 5-Aug. 23
Visual Aids (1) — Hugo Vitz
Stephen F. Austin State Teachers College, Nacogdoches
Visual Aids (3) — June 4-July 14, A. L. Long

Utah

Brigham Young University, Provo — June 9-Aug. 23
Lectures on Visual Education — Ellsworth Dent

Virginia

State Teachers College, Farmville — June 16-Aug. 23
Audio-Visual Education (3) — E. M. Johnson
State Teachers College, Fredericksburg — June 16-July 19
Audio-Visual Aids to Learning (3) — Paul J. Ritter
State Teachers College, Harrisonburg — June 16-July 25
Auditory & Visual Instruction (3) — James W. Brown
Administering a Program of Audio-Visual Instr. (3) — James W. Brown
Laboratory Course in Audio-Visual Instr. (3) — James W. Brown
University of Virginia, Charlottesville — June 16-July 26
Audio-Visual Aids to Curriculum Activities (1); Graduate Workshop in Education—Special Problems in Audio-Visual Education (1 or 2) — J. A. Rorer
State Teachers College, Radford — June 16-Aug. 24
Visual Aids to Instruction — Ruth Livermon

West Virginia

Concord State Teachers College, Athens — June 9-July 19
Workshop in Audio-Visual Aids (2-4) — Godfrey Elliott
West Virginia University, Morgantown — June 11-Aug. 26
Audio-Visual Instruction (2) — H. B. Allen
West Virginia Wesleyan College, Buckhannon — June 9-Aug. 9
Audio-Visual Education (3) — Nicholas Hyma

Washington

Central Washington College of Education, Ellensburg — June 16-Aug. 15
Ed. 139; Visual Education (2½) — Loren D. Sparks
Eastern Washington College of Education, Cheney — July 19-Aug. 20
Visual-Sensory Aids in Education (2 or 3) — Clarence Jayne
Audio & Visual Aids (2½) — Clarence Jayne
The Motion Picture in Education (2½) — Clarence Jayne
State College of Washington, Pullman — June 23-Aug. 15
Visual Sensory Aids in Education (2) — Wm. Gnaedinger

Wisconsin

State Teachers College, Eau Claire — June 16-July 25
Audio-Visual Education (2) — Hazel Romharter
State Teachers College, Platteville — June 16-July 25
Visual Education (1) — E. J. Stoneman
State Teachers College, La Crosse — June 16-July 25
Audio-Visual Education (2) — Mrs. Edith Wing
Stout Institute, Menomonie — June 23-Aug. 1
Visual Education (2) — Paul C. Nelson
Experiments in Visual Education (2) — Paul C. Nelson

(Continued in May)

Among Ourselves

Notes from and by the Department of Visual Instruction of the National Education Association.

Conducted by JAMES D. FINN
Colorado State College of Education, Greeley

To the Members of the D.V.I.

HAVE YOU NAMED YOUR NOMINEES FOR OFFICE AND RETURNED YOUR BALLOT TO THE SECRETARY-TREASURER, WARD C. BOWEN? Remember that your ballot must be in his hands before April 30. Personally, I am proud of our nomination and election system and I boast of our democratic procedures to my friends, but this kind of system works as it should only when every member meets his responsibility to share in the nomination and election.

Nominating Committee

Each year the terms of two members of your Executive Committee expire and two members must be elected to serve a term of three years. There are six members at large in the Executive Committee and, according to the Constitution, these members "shall be selected so far as practicable from different sections of the country." The procedure for selection is that a Nominating Committee, appointed by the President with the approval of the Executive Committee, names nominees and they are elected at the annual meeting. This year the terms of Edgar Dale of Ohio State University and Nelson Greene of EDUCATIONAL SCREEN expire. The Nominating Committee has been named as follows:

Louis A. Astell, Urbana, Illinois
Ernest R. LaFollette, Grosse Pointe, Park, Michigan
Francis W. Noel, Santa Barbara, California
W. T. Powell, El Paso, Texas
Gayle W. Starnes, Lexington, Ky., *Chairman.*

Summer Meeting

Plans are moving forward for the summer meeting in Boston due in large part to the interest and cooperation of Abraham Krasker who is chairman of a committee appointed by the New England Section of the Department to aid in the program planning. At the summer conference departmental meetings must be confined to afternoon sessions leaving the mornings free for attendance at the General Sessions of the N.E.A. Consequently, we are finding difficulty in making a place for all that we would wish to include, and we must leave time, too, for the important business session when the Zonal Plan will be voted upon.

Tentative plans call for a joint meeting with the Department of Secondary Teachers for the session on Monday afternoon, June 30. It would seem logical then to plan our Luncheon Meeting for Tuesday, July 1, with the program emphasizing some basic phase of visual instruction in relation to elementary education. The business meeting will follow. Then on Wednesday, "Visual Instruction in New England" will be the theme. Thursday could be left free for guided (or unguided) visits in the Boston area. May I urge especially those members who are to attend the Boston meetings to let me have their suggestions immediately. We want to meet your interests and needs.

Insignia

Department member M. R. Klein of the Nathan Hale Junior High, Cleveland, thinks that we should have some insignia that could be used on Department stationery, posters, to head these columns, and in other places where a sign of distinction is appropriate. He not only made the suggestion, but made that suggestion concrete by submitting designs. In turn, I submit them to you for your comment, suggestions, approval, or inspiration.

New Members

Have you sent any new names lately to Ward C. Bowen, State Education Department, Albany, New York, of those people who are not members of the Department, but who should be?

Sincerely yours,
PAUL C. REED
President

Notes From the Field

Michigan

Several members of the D.V.I.—Keith Elliot, Principal of the Verona School, Battle Creek; Lewis Lash, Principal of the William Ford School, Dearborn; Roy E. Robinson, Director of Visual Education, Highland Park; and W. W. Whittinghill, Director of Visual-Audio Education, Detroit—formed the major part of the committee preparing the 1941 yearbook for the Department of Elementary School Principals for the State of Michigan. The title of the yearbook is "The Implications of the Motion Picture in Education," and is a companion to the 1940 yearbook, "The Implications of the Radio in Education." Release date of the yearbook is at the May conference of the department in Detroit.

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Louisiana

The Division of Extension, Louisiana State Normal College, held a conference on audio-visual education at Natchitoches on Friday, February 14, and Saturday, February 15. The conference included two sessions devoted entirely to demonstration lessons using audio-visual aids. Motion pictures, slides, phonograph records, film strips, and maps were demonstrated in classroom situations. Other topics of interest were school production of films, projection problems, teacher education, and audio-visual materials in various areas.

A division of audio-visual aids has been added to the Louisiana State Department of Education, with Miss Mary Clint Irion as supervisor. Miss Irion goes to Louisiana from Los Angeles, California, where she has been in visual education work with the Los Angeles County Schools.

R. H. Mount, President of the Louisiana Branch of the D.V.I., is now Director of Visual Instruction in the Louisiana Polytechnic Institute, Ruston. Mr. Mount was formerly principal of the teacher training school and chairman of the visual education committee of the same institution. Polytechnic is the first Louisiana institution to have a full-time director of visual instruction.

Texas

Culminating a year's work since the organization of the Radio-Visual Aids section of the Alamo area, Texas State Teachers Association, a section meeting was devoted to a demonstration of classroom use for both radio and visual aids. The meeting was held March 7 in the Pan-American Room of the Gunter Hotel, in connection with the regular convention. Approximately four hundred persons were present.

The program began with a declaration of purposes by Miss Emma Gutzeit, Director of Radio and Visual Education, San Antonio, and a brief talk on Radio in Education by Miss Frances Scarborough, Educational Director of KTSA. The major part of the program consisted of a carefully prepared demonstration to show teachers how a motion picture and a radio broadcast can be coordinated in the classroom. An American history class from Burbank Vocational School under the direction of their teacher, Miss Lucy Posey, carried on the demonstration. They listened to the American School of the Air broadcast on Immigration, participated in a follow-up student broadcast, and witnessed a motion picture on Immigration. The lesson closed with a demonstration by two immigration officials, showing how an alien is inducted into United States citizenship. At the conclusion of the program teachers were invited to make a tour of the studios of KTSA.

New England Branch Meets

"Visual Aids in Defense of Democracy" is the theme of the Visual Education Conference to be held by the New England Branch of the D.V.I. on May 3rd at the University of New Hampshire. Mr. Henry B. Stevens, Assistant Director of General Extension Service for the University, will act as Chairman at the morning session and present an address of welcome. Other topics and speakers are: "Aims of the Department of Visual Instruction" by Professor Abraham Krasker, President of the New England Branch; "In-Service Training of Teachers" by Dr. Lloyd P. Young, President of Keene Teachers College; "Successful Methods in Using Visual Materials" by Dr. Charles F. Hoban, Jr., American Council on Education; "Visual Education in Junior High Schools," by Raymond I. Beal, Principal, Junior High School, Portsmouth, N. H.; "A Supervisory Union Visual Education Program" by Superintendent Laurence O. Thompson, Keene, N. H.; "The Wartime Use of Motion Pictures in Britain" by Richard Ford of the British Library of Information; "Education in Defense" by Dr. Fred Engelhardt, President, University of New Hampshire; "Visual Aids as Curricular Materials" by Dr. Howard R. Jones, Assistant Professor of Education, University of New Hampshire; "The New England Educational Film Association" by R. Haven Falconer, Assistant Professor of Education, University of New Hampshire. Panel discussions will be held on the following topics: "How Can we Bring About Better Utilization of Visual Aids?"; "Are Free Advertising Visual Aids a Blessing or a Blight for Education?"; "Should Schools Produce Their Own Visual Materials?"; "Are New Hampshire Schools Adequately Equipped for Using Visual Aids?"; "Can the Schools Be Better Served?"

Pittsburgh Audio-Visual Conference

The final meeting in a series of four monthly audio-visual conferences arranged by Dr. John Hollinger, Director of Science and Visualization, Pittsburgh Schools, and Herbert T. Olander, Instructor in Audio-Visual Aids at the University of Pittsburgh, will be held at the University on the morning of April 26th. The subject to be discussed is "The Place of the Library in a Visual Education Program" and Miss Marguerite Kirk of Newark, New Jersey will speak on that topic. There will be showings of a silent motion picture "Jack Learns to Use the Library" and of a filmstrip subject "Know Your Library." Mr. Ross Cibella of Pittsburgh will give a brief statement of "The Use of Microfilm by Libraries." Microfilm Readers will be exhibited.

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Nebraska Has Visual Education Clinic

The first Visual Education Clinic ever held in Lincoln was on March 8, 1941. It was sponsored jointly by the Lincoln public school system, the Extension Division of the University of Nebraska, and Teachers College of the University of Nebraska. Over three hundred persons registered at the Clinic with representatives from seventy different towns. Over a hundred attended the noon day luncheon.

The Visual Education Clinic opened in the morning with greetings by Dr. A. A. Reed, Director of the Extension Division of the University of Nebraska. The theme of the morning session was "The What, Why, and How of Visual Education," Superintendent M. C. Lefler presiding. The afternoon session used the theme, "How to Produce Visual Aids in Local Schools," Mr. Sam Adams, NYA Supervisor, presiding. The out-of-town speakers were Mr. Douglas Dunham, Director of Visual Education at Norfolk; Mr. Leo Smith, Omaha South High School; Dr. J. A. Moore, Wayne State Teachers College; Supt. Paul Combs, Valley; Supt. J. R. Vinckel, Blair. The last two speakers addressed the luncheon group on administration of visual aids in public schools, and the need for a film library.

The committee responsible for the Visual Education Clinic at Lincoln were: Mrs. May W. Morley (Chairman), Miss Mary O'Connor, Mr. E. L. Blue, Mr. C. O. Morrison, Mr. R. W. Howland, Mr. T. V. Goodrich all of the Lincoln public schools; Mr. Sam Adams, NYA Supervisor; Mr. James W. Taylor, Supervisor of Visual Education of the Extension Division.

ANFA Convention

Panel Discussion Sessions on problems of the visual education and non-theatrical motion picture fields will highlight the program of the Third Annual Convention of the Allied Non Theatrical Film Association Inc., to be held at the Hotel Astor, New York City, April 18th and 19th. The program opens on Friday, April 18th at 4 P.M. with a General Membership Meeting, to be followed in the evening by Panel Discussion Sessions on the following topics: Libraries and Their Problems; Legislation and the Non-theatrical Field; Projector and Equipment Sales; Distribution and Projection Servicing of Industrials; Distributor Problems; General Welfare; Utilization of Product. (The Panel Sessions, beginning at 8 P.M. will be open to visitors.) On Saturday afternoon, a concluding General Membership Meeting will be held to elect officers for 1941-42, and in the evening a Dinner-Dance for members and non-members and their guests. The convention will mark the conclusion of two years of active efforts on the part of the ANFA to improve the standards and welfare of the entire non-theatrical film industry.

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ORIGINALLY DESIGNED LANTERN SLIDES FOR STAGE SCENERY

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LANTERN slides are generally associated with illustrated lectures of travel, science work, Christmas story reproductions, and the study of great master artists. Some experimental efforts on the part of Art teachers and their pupils in modern schools have resulted in the discovery that lantern slides afford a splendid medium for creative work in their special stage productions. While lantern slides have been made and used for more years than children in the schools can remember, it was not until recently that they were employed for the purpose of stage scenery for dramatic productions. Since many school superintendents rate slides as valuable equipment for visual instruction, and proclaim that teachers in their respective schools make good use of lantern slides and projectors, they will find in this projected scenery technique additional uses for their materials of instruction.

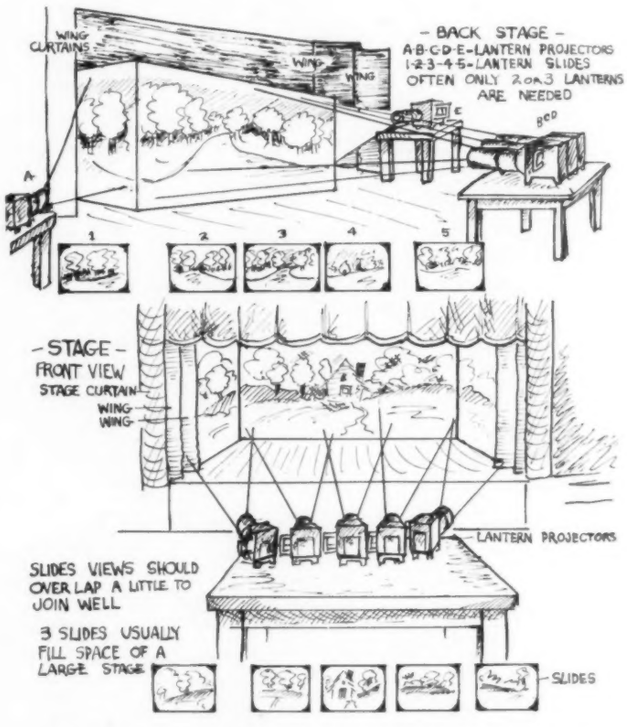
Many school systems own one, two, three, or more lantern slide projectors to fill the wants of the many teachers who need them in the various classrooms at the same time. Within recent years many schools have also purchased such materials as frosted glass slides, cover glass slides, lantern slide crayons and inks, masks, binding tape, etc., for the purpose of providing "pupil-teacher-made" lantern slides in the various grades of the schools. If such materials are not already on hand they can be purchased with little expense, and used for original creative design work for "projected scenery."

Slides definitely designed for use as stage backgrounds may be projected upon the background drops or on plain curtains of the stage during the various scenes of the school play or musical programs, with a number of distinct advantages to both the workers and the audience observers. The simple shifting of the lantern or of the lantern slide by the lantern slide operators, materially lessens the time usually needed by amateurs in their changes of scenery. The lantern slides also effect a saving of time and the expenses occasioned by the construction and painting of large stage flats. The physical labor of moving the customary scenery on and off the stage requires a large stage crew, with the inconvenience of excusing pupils from classes, shifting programs and the like. The projected scenery reduces this factor to a minimum.

Certain stage conditions are necessary, however, to make the stage projected scenery successful.

The stage needs to be one, preferably, with enough space directly behind the back drop of sheer light colored muslin, to project the background of the desired size on this muslin curtain. The curtain used should be thin enough for the light to shine thru, but opaque enough for the color to show against it. The width of the curtain is a factor of considerable concern. If it is extremely large, two, three, or even more lanterns will be needed to project the whole background as a continuous scene. If the projected scenery becomes a regular feature of dramatic productions, it might be well for the school to purchase different "wide angle" focal length lenses for the projectors. With ideal conditions, the shift of scenery is accomplished by a change of slides in each of the respective lanterns used.

All stages are not ideal for lantern slide projected scenery work because of too little space behind the curtain drop and/or their large width dimensions. In such cases the projection must be made from in front of the stage and the actors. The projectionist then operates



Sketches showing techniques for projected scenery.

the lanterns from a table located far enough back in the auditorium to give the scenery the required size to fill the screen. If the auditorium has a balcony, the projection work will be less conspicuous if done from there than when operated from the auditorium proper. In such a position much more of the projected scene will be above the heads of the actors. The designer of the slides must now deal with the conditions of having the actors in the beam of light. Hence all dark color and very intense colors must be arranged to be projected above the heads of the actors, otherwise the shadows and strong colors will fall on the players and eliminate them from the view of the spectators. Since the actors

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are the most important part of the stage, the scenery must be designed as a background for them and their work. The artist designer of original slides for stage sets needs to be aware of the limitations of the individual stage, then produce artistic settings helpful to the actors. These scenes must be in keeping with the purposes of the act, and always designed as a background for the actors.

Some people prefer the soft color results that may be obtained by the special slide crayons, rather than the brilliant colors from the lantern slide inks. All colors need to be transparent, hence wax crayons are to be avoided in this work. That is why lantern slide company materials produce better results than any other type for problems in color projection situations. The common lead pencil is very useful in blocking out the design, and giving definite boundaries to parts of the scene. A splendid feature of etched glass slides is that which makes it possible to wash the crayon or inks from their surface and use the slide over and over again.

Interesting designed slide results may be projected on the closed front curtain by using an intense color for only a few minutes, or during the short time a reader or speaker needs to give the introductory remarks. In such cases the audience will generally not see the speaker if he stands in front of the curtain and directly in the projected design. This type of front curtain projection would very likely not be used unless stage conditions precluded satisfactory projection on the back drop curtain.

A School-Made Film Stands on Its Own Feet

(*Concluded from page* 149)

group used the film Saturday evening in connection with their regular program for school age boys and reported that several asked for information about our housing project after they had seen two regular feature story films, too."

From the experiment which Mr. McPherson has conducted in the making of school films, it would seem to be logical to suppose that where a school film is the outgrowth of study work in the regular program and is well organized under teacher supervision, it can become a very excellent medium for use by other school groups in their actual study. A further step would be the eventual linking together of all efforts by schools in this direction and a production and distribution program that would tie in with many of the regular courses now in the curriculum. Thus it would be a real visual expression service by young people for young people, stimulating to them and educational, as well.

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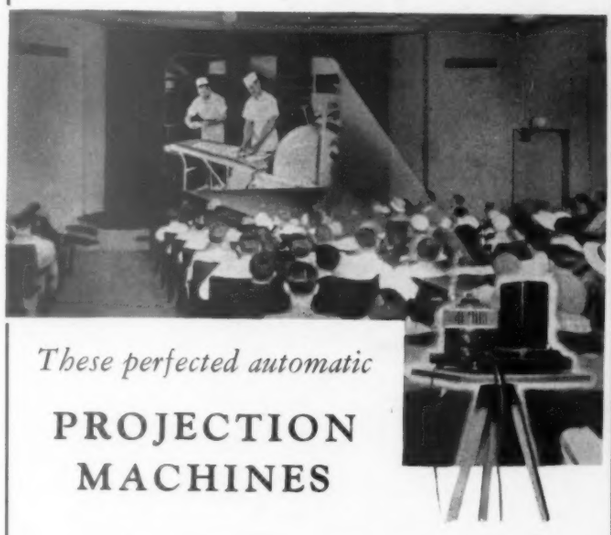

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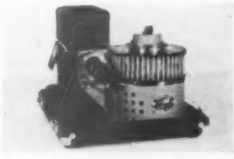

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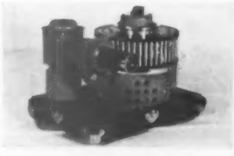

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The Third Midwestern Forum on Visual Teaching Aids

THE Third Annual Midwestern Forum on Visual Teaching Aids met at the Congress Hotel in Chicago on March 28th and 29th. Purpose of the Forum was stated at the first general session by Dr. Wm. C. Reavis of the Department of Education, University of Chicago, and general Chairman of the Forum. He outlined the aim of the two-day meetings as an effort to provide opportunity for visual educators to "see how it's done" through the use of actual classroom demonstrations. Believing that progressive teachers and school administrators are interested in the effective use of all types of visual aids, the program of the 1941 Forum was built on a horizontal rather than a vertical plane, and a careful search was made to provide demonstrations in a wide range of subject matter.

"Present Trends in Visual Education" was the theme of the morning address by Mr. Ford L. Lemler, Director, Bureau of Visual Education, Extension Division, University of Michigan. Immediately following Mr. Lemler's remarks, the group separated for the first meetings of the elementary and the secondary school clinics.

The Clinics

Keynote of the classroom clinics was the demonstration of teaching procedures in the use of visual teaching aids in actual classroom situations. Demonstration subject matter varied from science to vocational guidance with decided emphasis on social science, not surprising in these days.

Elementary Clinic

Chairman of the elementary school clinic was Mr. Harry D. Gillet, Principal, University Elementary School, University of Chicago, while Mr. E. C. Waggoner, Director of Science and Visual Education in the Elgin Public Schools, Elgin, Ill., presided at the meetings of the secondary clinic. Each clinic had three sessions, following a similar pattern in each of introduction, class demonstration, and discussion by the "audience."

Science as taught in the primary division and safety as taught in the intermediate division was the double subject of the first session of the elementary clinic, the demonstrations being presented by Mr. Glen O. Blough, and Mr. Leslie W. Irwin, both teachers in the Laboratory Schools of the University of Chicago. This was followed in the afternoon session by a social science demonstration at the third and fourth grade level, presented by Miss Eugenia Humble and Miss Scherer, both teachers in the Oak Park Public Schools. The demonstration class of thirty eager youngsters explored their Mexican neighbor to the South through use of the sound film "Mexican Children." The class had already seen the film once without sound at the beginning of the unit. With this as motivation, the children had then studied Mexican dress in art class, learned a Mexican song in music study, brought curios to class, and done individual reference reading. The results of this reading they brought with them in the form of notes and marked pages in their books which they used to substantiate facts they contributed to the class activity following the sound showing of the film, when Miss Scherer led them in constructing their own version of the film, adding details from their reading that had not appeared in the film. In the discussion following the demonstration Miss Scherer explained the objectives of showing the film twice: (1) at beginning without sound, to stimulate creative thinking and a spirit of inquiry; (2) at end of unit, with sound, to enrich reading and knowledge gained through books and to furnish basis for original story. Also brought out in the discussion was the fact that the geographical emphasis in the teaching approach was more suited to the grade level than a socio-economic emphasis.

Social studies also provided the material for the closing session of the elementary school clinic, this time in the intermediate division. The demonstration was ably presented by Miss Mildred C. Letton, and Miss Ida B. DePencier, both teachers in the Laboratory Schools of the University of Chicago.

Secondary Clinic

For its first session the secondary school clinic also turned its attention to a social science demonstration. An American History class acted as "guinea pigs," introduced by Mr. Truman D. Fox, Director of Visual Education, J. Sterling Morton High School, Cicero, Ill. The group saw "Early Settlers in New England" as the climax to study of a unit on colonial life. The film was also used to bridge between this unit and one following on the development of independence and the westward expansion from the thirteen colonies. Class discussion was led by three "chairmen" who had each seen the film five times and had prepared leading questions based on analysis of the political, economic and social aspects of colonial life as brought out in the film, which was used as a point of departure for a discussion, amazing in its breadth. The adult group centered its discussion on the value of student previews of films, and the number of previews of a single film.

A science demonstration using the film "Properties of Water" featured the second session at the secondary level, presented by a chemistry class of Mr. G. I. Renner from Elgin High School. A lively discussion ended this session, revolving around the relative merits of teaching procedures with science films.

A less usual subject—vocational guidance—provided the material for the final session of the secondary clinic. Mr. Milton E. Hahn, Department of Psychology, University of Minnesota, presented the demonstration in the absence of his coworker, Dr. E. G. Williamson. After a rapid-fire introduction with blackboard outline, Mr. Hahn showed the film "Aptitudes and Occupations" on which he and Dr. Williamson acted as consultants. The film was a graphic presentation of the lecture material, showing actual situations in which were used the specific abilities — mechanical, clerical, social, musical, artistic, scientific, and abstract intelligence. As a guide to vocational placement "profiles" were shown of the varying amounts of these abilities possessed by different individuals. Occupational adjustment was shown to depend on a combination of interests, abil-

(*Concluded on page* 172)

(Photo courtesy of Charles M. Boesel)

An elementary classroom clinic in action.

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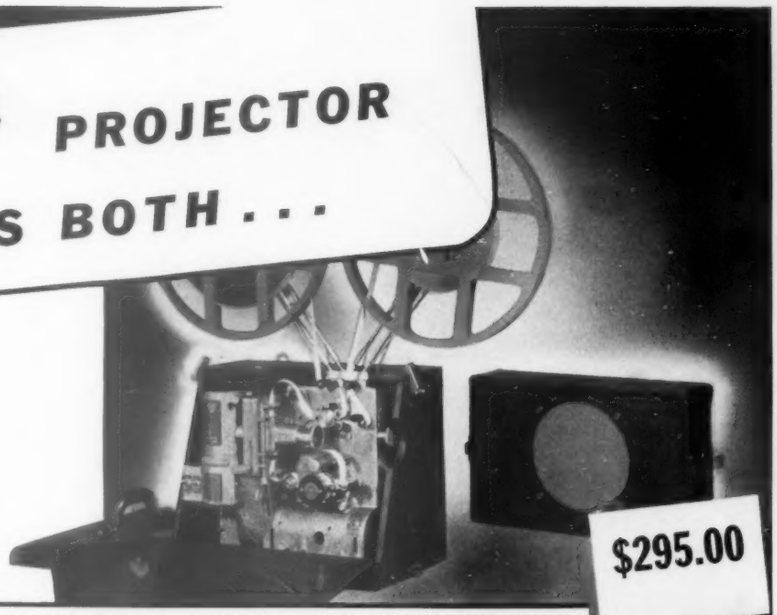

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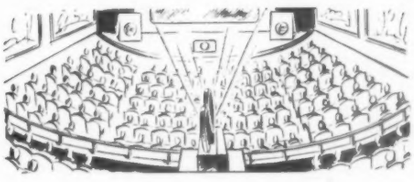

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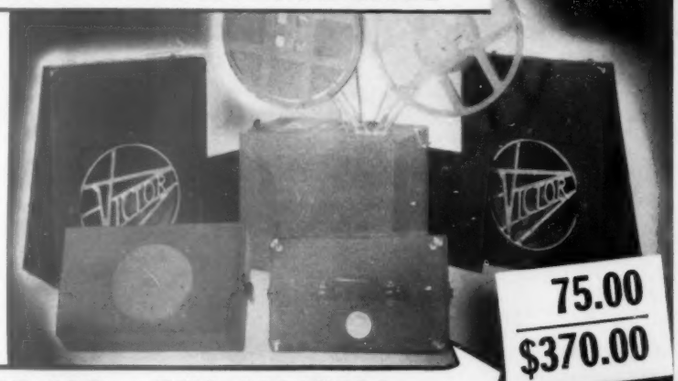

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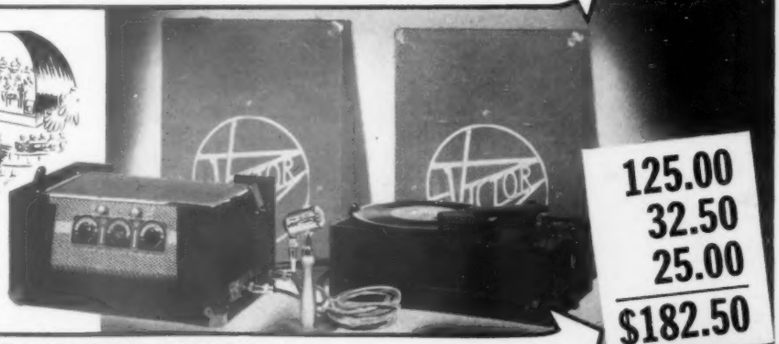

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ities, and motivation. Although the class —a volunteer group from Elgin High School—had seen neither the film nor Mr. Hahn before, they participated in a thoughtful discussion of the material. The discussion of the adult group brought out the need for, and interest in, more films of this type, which provide not merely vocational information but real vocational "guidance."

Luncheon

Of special interest to directors of visual education was the opening-day luncheon for them. After luncheon the group divided for two round-table discussions lasting well into the afternoon. The one for public school directors was presided over by Joseph E. Dickman, Director of Visual Education, Chicago Public Schools, while the state directors of visual education met with Mr. J. E. Hansen, Chairman, Bureau of Visual Instruction, University of Wisconsin.

The Banquet

A lighter note was struck at the third annual banquet held in the Casino of the Congress Hotel. Mr. H. E. Erickson of the Ampro Corporation acted as toastmaster and introduced both speakers of the evening, Mr. David E. Walker, Supt. of Schools, District 76, Evanston, Illinois, and Dean Gordon J. Laing, University of Chicago. Nearly 200 banqueters gave evidence of genuine enjoyment of the evening's program, which differed in certain important respects from the same function last year.

Administrator's Clinic

The two-day Forum closed with a school administrator's clinic—a new feature this year—on the use of visual materials in school interpretation. Examples of such materials were presented for appraisal by a panel of administrators under the chairmanship of William J. Hamilton, Superintendent of Schools, Oak Park, Illinois. Members of the panel were: Orville T. Bright, Superintendent of Schools, Flossmoor, Illinois; Nelson B. Henry, University of Chicago; J. Stanley McIntosh, Director of Visual Education, District 76, Evanston, Illinois; E. E. Morley, Principal, Heights High School, Cleveland Heights, Ohio; Claude E. Vick, State Department of Public Instruction, Springfield, Illinois.

The materials presented consisted of: (1) miniature slides prepared and used by Charles Bruner, Superintendent of Schools, Kewanee, Illinois; (2) standard slides by E. E. Morley, portraying an evaluation of the Heights High School, Cleveland Heights, Ohio, on the criteria established by the Cooperative Study of Secondary School Standards; (3) a film by J. E. Pease, Superintendent of Schools, La Grange, Illinois, showing activities of teachers and pupils in the schools of Muskegon, Michigan; (4) a two-reel film on a day in Wilbur Wright High School, Dayton, Ohio; (5) a school-film prepared by Arnold P. Heflin, on a day in Lane Technical High School, Chicago; and (6) a section of a film in color presented by T. R. Foulkes, Superintendent, Maine Township High School, Des Plaines, Illinois.

The following criteria were used by the panel in evaluating the visual materials presented as aids in public relations:

Mechanical Features

(a) Photographic effects
(b) Does the photography follow best current practice in photographic technic
(c) What about the sequence of shots
(d) Use of color films
(e) Titles—are they effective
(f) Sound

Aim and Purpose of the Film

(a) For what kind of audience is film designed
(b) Are definite public-relations values evident
(c) Is the film too educational
(d) Are entertainment features overemphasized
(e) Is the film too spectacular

Evidence of Careful Planning in Film Construction

(a) What about length of film
(b) Judgment used in the selection of subject matter
(c) Is there evidence of scenario organization

The Educational Values in the Film

(a) Does the film leave definite impressions of the organization of the work offered in the schools
(b) Are specific features of the school work shown
(c) Is viewing the film the equivalent of a visit to the schools
(d) Are general educational methods demonstrated
(e) Are specific educational methods demonstrated
(f) Is pupil progress shown
(g) Are extra-curriculum activities shown

Resulting Impressions

(1) Does the film "sell" the school to the public
(2) Are educational outcomes defined
(3) Is the film too long to leave definite impressions
(4) Is there a general audience appeal
(5) Does the film "tell the story" or leave confused impressions

The various sessions of the Forum were attended by nearly 500, registering from not only the Middle West but all parts of the country. No small part of the conference was the fine array of exhibits, larger and more extensive than in previous years. These were on display throughout the conference and were assembled under the able chairmanship of Mr. Wesley Greene, College Film Center. At the Executive Committee meeting on Saturday plans were enthusiastically formulated and adopted for the "Fourth Midwestern Forum on Visual Teaching Aids" the coming year.

Proceedings of the DVI Meeting

(*Concluded from page* 161)

(This item below chances to be the last, but by no means the least, of the DVI Proceedings at Atlantic City. The Committee on Field Experiences is a definite affiliate of the Department of Visual Instruction of the NEA. It is shortly to have its own regular Department in the pages of THE EDUCATIONAL SCREEN under the editorship of Dr. Verna Carley.—Editor)

Minutes of the Meeting of the COMMITTEE ON FIELD EXPERIENCES

February 26, 1941
Atlantic City, New Jersey

AFTER considerable discussion as to the next stages of the Committee's work it was unanimously agreed that the immediate need is for a manual to help people who are planning field trips and who have not had sufficient experience in this area. A special committee to draft plans for this manual was appointed. The committee consists of Dr. Atyeo, chairman, Mr. Stanforth, Mr. Rothschild, and Mr. Olsen. The committee was given the power to call upon any other people in the field for assistance.

Plans were then discussed for the use of our page in EDUCATIONAL SCREEN. It was agreed that Miss Carley serve as editor and that the preparation of material be considered an all-committee job. The first issue should deal with the philosophy of field trips and there should be a discussion of the Committee and its plans for the June issue. It was suggested that in subsequent issues there be a description of field trips in different subject areas; also that material be included from as many zones as possible.

In explaining the work of the Committee, it was agreed to try to develop some committees within the several zones called for in the zoning plan being developed for the Department of Visual Instruction. Mr. Park and Mr. Wattenberg were asked to take charge of this work.

In our plans for developing coordinating units, it was agreed to concentrate upon Michigan as a demonstration project on the possibility of a statewide coordination of field experiences. The committee in charge was to consist of Mr. Park as chairman, Mr. Roberts, and Mr. Wattenberg.

In view of the possibility of the chairman being drafted, Mr. Park was elected vice chairman of the Committee.

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Reel II, covering operations not included in the first film, is being prepared along the same lines. Scheduled for release about May 1, it will complete a pair of sound films of unique importance to all schools undertaking pre-employment machine-shop training for national defense industries. Order Reel I now for immediate delivery—Reel II for shipment when ready. Price per reel (16-millimeter sound), $36. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Eastman Classroom Films

The Literature in Visual Instruction

A Monthly Digest

Conducted by ETTA SCHNEIDER

HISTORY AND PRINCIPLES

Notes on the Historical Background of Visual Education — Manson Milner Brien, St. Louis Country Day School—*Education*, 61:321 Feb. 1941.

A carefully-documented account of the visual techniques used in the Middle Ages before Comenius wrote his picture-book commonly called the beginning of visual aids. The resources of art at that time were devoted to instructional purposes. Sculpture, stained glass windows, even the scheme of gothic architecture were intended to record events and educate. Early printing made use of woodcut illustrations to supplement the printed material. Then etchings and engravings were used. By the 17th century when Comenius wrote his Orbis Pictus the use of pictures had already been in common use. There are examples of illustrated books in medicine, diplomatics, history, mathematics, physics and many other subjects.

The article should be read in its entirety for a fascinating account of the part played by pictured materials, maps and the like in the centuries preceding our own. The author concludes, "Indeed visual education today is neither a fad nor a fetish, but the culmination of consistent progress throughout 800 years. Modern inventions and modern techniques have in no way altered its fundamental philosophy. Rather they constantly present an ever-widening opportunity which requires . . . a thorough investigation on behalf of teachers and students in every field, if we are to be true to our heritage."

ADMINISTRATION

A Director of Visual Instruction—Roy Wenger—*Social Studies*, 32:81 Feb. 1941

How a director of visual instruction can help a social studies teacher:

1. He collects information as to sources and types of materials available. 2. He helps in securing materials. 3. He helps in getting equipment when needed. 4. He can suggest techniques of using materials. 5. He trains a staff of student assistants. 6. He can stimulate the production and use of school-made materials. 7. His office can serve as a clearing house for information.

Visual Aids for Education—Jewell Ross Davis, Warrensburg, Missouri—*School and Community*, 27:118 Mar. 1941

The Missouri State Department, in cooperation with the Works Progress Administration is circulating visual aids for use in the schools of that state. There are nine centers.

Equipping a Room for Visual Instruction—William T. Kutsche, East Grand Rapids—*Education*, 61:345 Feb. 1941

Modern Visual Education at Work—Lawrence W. Olson, Glencoe, Minn.—*Minnesota Journal of Education*, 21:248 Feb. 1941

The school program is centered in a permanent projection room.

Unsupervised Visual Education—Ralph Rochefort White, Weld, Maine—*Education*, 61:373 Feb. 1941

Results of a survey in the state of Maine.

UTILIZATION

Library Film Forums on National Defense—Alice I. Bryan, Columbia University—*Library Journal*, 66:241 Mar. 15, 1941

This article describes one of the most important developments in the use of motion pictures to date. Film Forums is a cooperative project undertaken by the Joint Committee of the American Library Association, the American Association for Applied Psychology, American Association for Adult Education and the American Film Center. During the spring twenty libraries in strategically situated sections of the country are presenting a program for ten weeks on "What We Are Defending," in which adults may discuss our material and human resources in relation to the defense program.

On the basis of the experience gained this spring a more extensive program will be planned for next fall and made available to a much larger group of public libraries. The cost to libraries that have access to a projector and operator is about $5.00 per evening. The American Film Center takes care of booking and routing the films.

The reader is referred to the original article for further help in planning and carrying out intelligent discussions with adults.

The Film in the English Class—Katherine Helfer and Regina Rosiny, Columbus High School, N. Y. C.—*English Journal*, 30:68 Jan., 1941

The English classes in this school undertook a study of the motion picture as literature and as a means of social expression. A detailed account is given of three of the Human Relations films used in this study. Each film was allotted three class periods—one for preparation, one for showing and discussion of the technical literary elements and on the last day the social and literary objectives were discussed. The study guides prepared by the Commission on Human Relations were used by the teachers. The teachers believe that the 50 classes that used the films benefited greatly from the film study.

Teaching Americanism through the Use of the Filmstrip—Camilla Best, New Orleans—*Education*, 61:333 Feb. 1941

Successful teaching of citizenship must be a development of the individual through activities as well as the teaching of subject matter. . . . By means of wide variety of subject matter found in the filmstrip, we are able to correlate the teaching of Americanism and the development of good citizenship in the course of study used in almost every school. Careers in the Army and Navy, conservation of our natural resources, American History, subjects on Latin America are examples of filmstrips now available.

A Follow-up Survey through Visual Aids — H. L. Cleland, Director of Guidance, Pittsburgh, Pa. *Occupations*, 19:331-4 Feb., 1941

A unique project in determining the kinds of jobs that high school graduates get after they leave school is described in this article. The schools produced a film showing 23 of the 1937 graduates in their present vocations. For each person there is given a general description of the high school he or she attended, how he got the job, what his high school record had been and his present responsibilities and salary. Scenes were shot in the various places of business. The cameramen were three teachers who had had considerable success at amateur photography.

How to Explore for Visual Materials—Marion Louise Israel, Los Angeles County—*Cal. Journal of Secondary Education*, 16:26 Jan. 1941

Suggestions to teachers who do not have ready access to a central library of visual aids for securing materials. Classification is made on the basis of (a) those that are historical and static; (b) those that are contemporary and dynamic.

RESEARCH

Sound Films for Reading Programs—H. A. Gray, Erpi—*School Executive* 60:24 Feb. 1941

A significant summary of research dealing with beginning reading and the influence of aural factors, indicating the value of sound films for primary readers.

Review of Educational Research in Visual Education—Edgar Dale and Charles F. Hoban, Jr.—*Encyclopedia of Educational Research*. 1941 MacMillan. $10.00

This is the best summary of research to appear since Dr. Hoban's critical summary in "Motion Pictures in Education: A Summary of the Literature." Provides excellent background information for students in visual instruction courses and for curriculum workers in other areas.

(*Concluded on page* 176)

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EVALUATION

Audio-Visual Aids and the Democratic Process—Etta Schneider—*Education*, 61:326 Feb. 1941

How democratic are you in planning for and carrying out a course for teachers in the use of audio-visual materials? How democratic are you in administering your program? How democratic are you as a teacher in permitting the students to participate in selection and critical evaluation? How democratic are the producers of materials in collaborating with schools and curriculum workers before and after production? Guides to help you in such an evaluation are given in the article. Constructive cooperation in such practices is just as important as in other phases of human relations that will promote democratic living.

Silent versus Sound Films in Education—M. H. Cowan, New York City—*High Points*, 23: no.2 :23 Feb. 1941

A review of research dealing with sound and silent motion pictures in schools. After weighing the pros and cons, the author appears to prefer silent films because they can be more readily adapted to local needs and because equipment is more convenient. The popularity of sound films, he believes, may be due to the fact that they are newer.

The Relation of Reading to Other Forms of Learning—(*Reading in General Education*, W. S. Gray, ed.)—Edgar Dale, pp 45-75. 1940. American Council on Education.

A clear-cut analysis of the psychology of learning that involves reacting to many kinds of experiences, verbal and non-verbal. A "must" for those who must be ever on the alert to re-evaluate the role of audio-visual aids in education.

The Relative Value of Sound and Silent Motion Pictures in Science Teaching—Roy W. Maneval, Tulsa, Okla—*Science Education*, 24:361 Dec. 1940.

This is the third study carried on by the writer in comparing sound films with other methods of direct teaching. In this investigation, one group of high school science students was taught by the use of sound films, another group, equated in intelligence, science ability and sex, was shown the same films with captions instead of a sound track. Each film was shown twice. Tests were given immediately after the film showings and 30 days later.

The study fails to give statistically significant evidence to show that either method is better. The data tend to show that the silent film was better in three out of four units. Pupils of higher mental ability tend to be taught better by the silent film method, those with lower mental ability improving better with sound films. The results of this experiment have significance for populations of which the sample used is representative.

Educational Motion Pictures Evaluated by Children—Florence E. Taylor, Penn. State College (formerly Horace Mann School, Teachers College, Columbia University). *Education*, 61:364 Feb. 1941

Illuminating evidence to support the principle that children are critical and can be helped in their critical judgment about films as well as other school experiences. Stenographic notes of a discussion with a group of fifth grade children are reprinted. The children were asked to evaluate the whole film program of the preceding semester and to discuss those films that helped them most. As children are given a greater share in the planning and carrying out of school programs teachers will find that they are keener and more sensitive, even at an early age, than we had thought.

Criteria for the Production and Selection of Visual Aids—David J. Goodman, N. Y. C.—*Education*, 61:359 Feb. 1941

A proposal for a national committee of educators and producers to set up criteria for the production and selection of the various types of visual aids, beginning with the filmstrip. Excellent bibliography on selection.

TEACHER TRAINING

Adequate Training for a Director of Audio-Visual Education—James D. Finn, Colorado State College of Education—*Education*, 61:337 Feb. 1941

This is an important article, especially since little attention has been paid to this topic in the past 10 years. The basis for setting up qualifications and the kind of training needed may not always be the same, but the article can serve as a starting point for discussion and the formulation of proposals that will apply to special communities.

A director of visual education must have a good general education, which includes knowledge of subject-matter areas, ability to write and interpret educational activities, a knowledge and skill in physics and other subjects that relate to optics and projection as well as an appreciation and understanding of the arts. He should have a grasp of educational theory and practice with some experience in teaching. He should have mechanical ability that includes photography, projection, sound and recording techniques, etc. Technical ability should include skill in radio writing and production, motion picture production, dramatics and music. In the field of audio-visual education his knowledge should be extensive. Finally, he should have a grounding in administrative practices that will facilitate the organization and operation of a department.

Other qualities which he must possess, apart from education and training, are ability to accomplish a lot with little money or equipment; qualities of leadership and ability to get along with people; a sense of balance and a desire to try out new ways.

A Neglected Factor in the Use of Audio-Visual Aids—W. Gayle Starnes—*Education*, 61:347 Feb. 1941

Teacher education is this neglected factor. The plea is for teacher education institutions to develop a systematic, well-balanced program.

LIBRARY AND VISUAL AIDS

Place of the Librarian in the Visual Program—Bess Landfear, San Francisco—*Cal. Journal*, 16:21 Jan. 1941

SCHOOL MADE VISUAL AIDS

Learning Safety through Making Movies—William G. Hart, Ohio State University—*Safety Education* 20:290 Mar. 1941

An account of a cooperative film project undertaken by a group of schools in connection with the safety program. Each school produced a film which was tailor-made to its local situation. The activity was educative to those who participated in planning and producing the films and it helped to enlist community cooperation.

Better attitudes toward safe conduct are already noted by the teachers. The films are being successfully used in other schools. The most important contribution of the Traffic Safety Film Project, however, is that it demonstrates a way of approaching safety education. The thirteen films enumerated in the article represent a variety of film techniques and topics for audiences from kindergarten to adult.

The Production of School Public Relations Films—Hardy R. Finch and Eleanor D. Child, Greenwich, Conn.—*School Management*, 10:195 Mar. 1941

An article for administrators which clarifies the values to be expected from school-made films and describes how to go about making films. The need for interpreting the schools to the people is greater now than ever before and motion pictures can be a strong ally.

Filming of Classroom Activities Adds Special Interest—Herbert H. Dittbrenner, Glencoe, Minnesota—*Minnesota Journal of Education*, 21:247 Feb. 1941

Camera Club's Contribution to Visual Instruction—Ralph E. Brant, Vassar, Mich.—*Education*, 61:354 Feb. 1941

The Zoo Goes to School—Frank W. Trevor, Millbrook School—*Education*, 61:369 Feb. 1941

The story of an undertaking that has extended over four years in the building, on the school grounds, of a zoo where animal life can be studied for biology, wildlife conservation and other practical school purposes. Other outcomes from this project have been noted in the language arts, manual activities, community relations and social understanding. Worth reading in the original.

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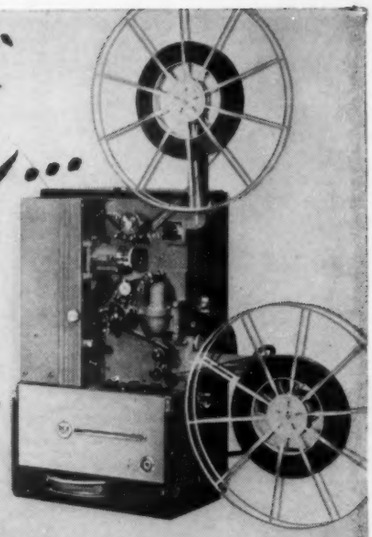

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NEW FILMS OF THE MONTH
As They Look to A Teacher Committee

Conducted by DON WHITE
In Charge of Audio-Visual Extension Service
Division of General Extension,
University System of Georgia, Atlanta

Producers wishing to have their new films reviewed on this page should write Mr. Don White at 223 Walton Street, N. W., Atlanta, Georgia, giving details as to length, content, and basis of availability of the films. They will be informed of the first open screening date when the Teacher-Committee can view the films. The only cost to producers for the service is the cost of transporting the prints to and from Atlanta, which must be borne by the producers.

The Honey Bee (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's guide to be furnished.

In this film unusual closeup photography presents a study of the honey bee. The first sequence begins with scenes of bees in an apple orchard. The three castes of bees—workers, drones and queens—are shown, and their functions in the hive explained. The second sequence shows in detail the metamorphosis of the worker bees, from the time the queen lays eggs in empty cells through the period when the larvae are fed by the workers, the spinning of the cocoons, the pupal stage, and finally the adult worker bees. Various phases of their work, including feeding larvae, ventilating the nest, and guarding the nest—the latter including scenes of the killing of a bumblebee which has entered accidentally—are shown. The next sequence explains the development of new queen bees. The old queen and the field bees leave the nest, and two newly-hatched queens battle for supremacy, one queen stinging her rival to death.

The fourth sequence follows the old queen and the field bees through the processes of swarming, scouting for and locating a new nest, and building a new comb. The last sequence shows the workers gathering nectar from flowers, doing the "honey dance" upon returning to the nest, and depositing the honey in the comb. In this connection the bees are shown gathering pollen for bees' bread, doing the "pollen jig" upon returning to the nest, and storing the pollen for winter food. As the film concludes with scenes of bees in a field of clover, the narrator states that bees perform important services by helping to cross-pollinate flowers and by giving us honey.

Committee Opinion—An excellent film for use in science, nature study, biology and entomology, and agriculture classes at all grade levels. Among the strong points noted were clear closeup photography, effective narration and good organization. The film contains so much information that two or more showings probably will be needed.

Wheels Across India (Dodge) 30 minutes, 16mm sound, "Free." Also available in longer version (70 minutes, 16mm sound) which reputedly contains some advertising.

Highlights from a recent expedition by Armand Denis and his wife, the former Leila Roosevelt, through the jungles of Burma. The film begins with a scene of a peaceful New England home. But on a nearby lake, children are sailing a strange-looking outrigger boat from the South Seas, and their pets are full-grown hunting leopards. An explanation is given when it is revealed that this is the home of the Denis family of world-famous explorers. Preparations are being completed for departure on another expedition, this time through India.

First the explorers go to Rangoon, there to begin their motor trip across Burma. They make their way to a small interior province, where an unusual sight is encountered—gigantic water wheels which are used to irrigate the fields. Interesting shots of the great water wheels appear. Further in the interior, a dead city, formerly the capital of Burma, is visited. It is now revealed that the purpose of the journey is to locate the cult of the snake-worshippers; an old priest directs the travellers to a little-known corner of the country.

Giraffe-neck women, their heads held up by coils of metal, are next seen. The metal is removed from one woman's neck to show how it has been stretched. The cars carry the group to the edge of a lake, where the party takes to boats. Each of these is propelled by a large number of oarsmen, who use their legs in paddling. An exciting race culminates in the overturn of one of the boats. The expedition continues up a narrow river on rafts, and then goes through the dense jungles by foot.

A sequence upon teak logging appears here, with views of cutting and elephants at work dragging the great logs to stream beds. Care of the elephants, including bathing, also is shown. Leaving a lumber camp, the expedition rides on elephant back to the village of the priestess of the snake. The party climbs a mountain with the priestess and her natives, and the rites of snake-worship are next shown in a thrilling sequence. The priestess calls the king cobra "god" from his den, expertly dodging the deadly strikes, and performing the required ritual by kissing the top of his ugly head three times. A brief concluding sequence depicts the journey homeward.

Committee Opinion—A good film for use in geography, literature, economics, and social science classes at the junior and senior high, college and adult levels. The fact that the film takes ample time to show each thing portrayed, instead of skipping hurriedly over a larger number of topics, was especially

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commended. The title of the film is not entirely accurate, since it depicts a journey through Burma rather than through all of India. The film contains no advertising, and is excellent in all technical aspects.

The Power Behind the Nation (Norfolk and Western) 39 minutes, 16mm sound, "Free." Print reviewed was black-and-white, but film also is available in Kodachrome color film.

A detailed presentation of the uses, mining and processing, and railway transportation of bituminous coal in the Appalachian region. The film begins with a sequence which depicts the industrial might of the United States, explaining that bituminous coal furnishes more than 50% of America's energy. It refers to the chemical processing of coal, showing products and by-products obtained. Next, the film explains the necessity for close interrelation between the coal and railroad industries.

The nature, formation and mining of bituminous coal are shown in the following scenes. A map locates coal deposits in the United States; then the Appalachian coal field is shown, with the lines of the Norfolk and Western Railway superimposed upon it by animation. In one of the hundreds of mines which dot the mountains, details of the work of coal mining are shown, including scenes of the miners riding to work down the shaft, testing the air for gases, undercutting by machine, trimming the face, drilling, blasting, and loading the coal. The cars go up to the surface, then up the tipple, where the coal is dumped. It goes down over sizing screens, to the picking table where slag is removed, and finally through the loading booms into railway cars.

The next sequence shows in detail the method by which coal is handled through the great ocean coaling terminal at Norfolk, Virginia. A freighter is moved up to the pier; coal cars go slowly down an incline, across a scale, through a thawing shed, onto the elevator, and finally the coal is dumped through a chute into the ship.

As the film concludes, the narrator states that the United States can look with satisfaction upon its stores of coal, and that the Norfolk and Western Railway is proud of its part in supplying this essential material for the life of the nation.

COMMITTEE OPINION—A good film for use in courses at the junior high, senior high, and college levels in science, social science, geography, and industrial training. The film's sequence on mining is worthy of especial mention, but it was suggested that the entire film might have been shortened somewhat without appreciable loss of value. Photography (by Waldo E. Austin) is good; sound is good, and organization is adequate.

Plows, Planes and Peace (USDA) 17 minutes, 16mm sound, "Free."

Outlines America's program of national defense, with emphasis upon the contributions of agriculture. As the film begins the narrator reads a part of the Preamble to the Constitution, explaining that it is the American dream for the common man to enjoy the fruits of our country's resources and production. A

(*Concluded on page* 181)

Producers Named Above:

Dodge. Dodge Division, Chrysler Corporation, 7900 Joseph Campau, Detroit, Michigan. Prints also obtainable through local Dodge dealers.

Erpi. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y. Prints obtainable on rental basis through most State extension film libraries.

Norfolk & Western. Norfolk & Western Magazine, c/o Norfolk & Western Railway Company, Roanoke, Virginia.

USDA. U. S. Department of Agriculture, Motion Pictures, Washington, D. C. Prints also available through various State extension film libraries which serve as depositories for the Department. 16mm sound prints may be purchased at cost.

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FOR LOVE OR MONEY
With June Lang and Robert Kent.

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UNEXPECTED FATHER
Featuring Baby Sandy, Shirley Ross, Dennis O'Keefe, Mischa Auer.

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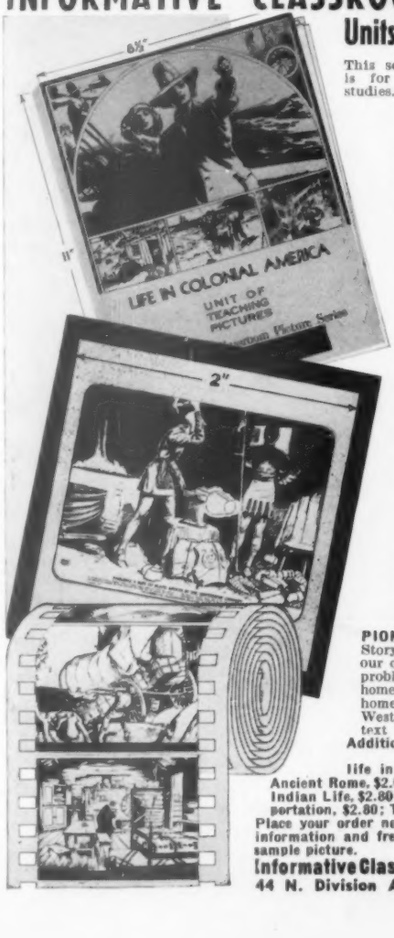

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44 N. Division Ave., Grand Rapids, Mich.

Among the Producers Where the commercial firms announce new products and developments of interest to the field.

New Erpi Products

A new series of phonograph recordings on *The Growth of Democracy* is announced by Erpi Classroom Films Inc., 35-11 Thirty Fifth Avenue, Long Island City, New York. The first of this series, "Magna Carta to the Constitution," is now available. It consists of twenty recordings on the 12-inch double-face records complete with attractive album and study guide. They are specially-designed classroom records presenting authenticated dramatizations of crucial episodes in the struggle for democracy. Not only are the portrayals informative, but they provide suggestive leads into other related aspects of the historical record. The study guide contains detailed suggestions for incorporating the use of the recordings into regular courses of study. The series was produced by William Exto, Jr. in collaboration with Erpi and Harry J. Carman of Columbia University.

The Mirrophone (Marketed by Electrical Research Products, Inc.)

Another new product distributed by Erpi is the Mirrophone, a unique tool for speech training and voice culture, manufactured by the Western Electric Company, Inc. This novel device uses no discs or film. It is an electrically-operated magnetic tape recorder and reproducer which is said to record and recreate speech and other sounds with amazing fidelity. This lifelike reproduction sharply exposes the least speech fault and makes the student aware of what it is in his speech that requires correction.

To record the user merely turns a switch and and speaks into the microphone. The voice is changed into electric currents which magnetize the tape, producing a magnetic image of the voice. This image remains unchanged on the steel tape through as many reproductions as desired and is then silently and automatically wiped from the tape as a new recording is made. The recording is ready for reproduction immediately at the throw of a single switch. The absence of any lost time in preparing the instrument for use assures maximum useful operating time in the classroom. The tape may be used an infinite number of times, thus avoiding all record expense and operating intricacies. The Mirrophone is portable and self-contained, the recording unit, amplifier and loudspeaker being housed in a single attractive cabinet.

New Filmstrip Subjects

Under the name of Practical Filmstrip Service, Carleton C. Pierce, Jr.,—who is also Director of Visual Instruction of Arthurdale High School, Arthurdale, West Virginia—has just released his first filmstrip subject "Our Presidents, 1789-1944," with other subjects to follow later in the year. Mr. Pierce also offers consulting services and laboratory facilities to schools and teachers who wish to work out material for presentation in film strip form.

U.S. Specifies Film Conditioning—"Equal to Vaporate"

Specification No. 41 on films for Visual Education in National Defense Training, for the Office of Education of the Federal Security Agency and all other Government Offices desiring prints, reads:

"Unless otherwise specified by the ordering office, each print shall be subjected to a permanent conditioning and protective treatment, equal to the 'Vap-Orate' process, reacting directly on the emulsion itself, the effectiveness and permanence of which are evidenced by a substantial raising of the melting point of the emulsion in water without loss of pliability reserve."

The phrase "reacting directly on the emulsion itself" is particularly interesting. It directly excludes lacquers, waxes, oil, and other surface applications.

Portable Amplifier System

In schools it is often convenient to utilize a portable amplifier system in connection with the showing of educational films, particularly as many of these films have the speech or musical accompaniment recorded directly on the film. Even where the auditoriums may be equipped with a built-in sound system it is not always convenient to use this for sound-on-film reproduction, especially where it is at times desired to show the film in some other part of the building.

A compact portable amplifier system, designed especially for this use, is the Model 669-T announced by Lafayette Radio Corporation, 100 Sixth Avenue, New York City. The carrying case divides, the two halves serving as baffles for the twin loudspeakers mounted in them. These are equipped with a cable which permits one to be placed 25 feet from the amplifier, the other 50 feet distant.

The 20-30 watt amplifier is designed for use with either 16 or 35 mm. film and is equipped with two 10-foot lengths of photo-cell cable complete with all plugs and connectors. A special equalizer circuit in the amplifier provides accentuation of the higher frequencies necessary to the best reproduction of sound from 16 mm. film. Provision is also made for connecting a microphone for announcements and to permit the system to be used for talks illustrated with silent film. The entire equipment is contained within a gray Spanish leatherette carrying case which is 18¼" high, 15" wide and 10½" deep.

Lafayette Amplifier System

History of Typewriter in Filmslides

Visual Sciences, Suffern, New York, report an addition to their growing library of filmslides, namely *The History of the Typewriter*. This roll, consisting of thirty-four frames including forty-two different models, clearly depicts the evolution of the machine, beginning with the earliest known attempt of an English engineer, who during Queen Anne's time applied for a patent. Most of the early attempts were directed toward perfecting a machine for writing raised letters to aid the blind. The typewriter of today is the result of efforts over 225 years.

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TYPEWRITER SLIDES
For Screen Projection
USE RADIO MATS
on sale by Theatre Supply Dealers
Write for Free Sample
RADIO-MAT SLIDE CO., Inc.
1819 Broadway, Dept. V, New York City

New Films of the Month

(*Concluded from page* 179)

brief sequence on industrial production for defense follows. Then it is explained that under the nation's farm program the farmers themselves have been allowed to plan for adjusted production to provide plenty without waste.

A contrast is drawn between rich soil and an eroded hillside as the narrator says that food cannot be produced from ditches and gullies; thus, terracing the soil is one of our means of defense. The contribution of the Ever-Normal Granary is explained. What the farm program means to America's food consumers is outlined in the following sequence, as bakery and packing plant scenes reveal some of the processes in baking bread and preparing meat for retail markets. There is an effective contrast here between Europe's ration cards and America's food stamps.

The last part of the film begins by explaining that America has created an army of temporary soldiers to serve the common defense. For this army, the farms supply cotton for tires, uniforms and tents; hides for boots and saddles; and food in abundance. The film concludes with the thought that America's farmers have learned new ways to insure defense against waste and hunger, and that America's seven million farms are working to build defense for the nation.

COMMITTEE OPINION—A good film to outline the importance of the farm and the national farm program in national defense. It was felt that the film's propaganda is entirely acceptable because of the present stress on defense. It should serve as good introductory, inspirational or summarizing material for classes in agriculture, economics, civics and other social sciences. Photography, sound and organization are good.

Chemistry and a Changing World (Erpi) 11 minutes, 16mm sound, sale price $50.00. Teacher's guide to be furnished.

In this film the planning and execution of one new chemical manufacturing process forms the basis for a rather brief explanation of the role of chemistry in modern life. As the film opens, general scenes suggest our dependence upon chemistry for manufactured products. The work of the research chemist is represented as a group of research chemists meet to map plans for a new chemical manufacturing process for their company. The problem is to work out a process to produce highly concentrated phosphoric acid from electric furnace phosphorous. After months of research, the research men turn over their data to a chemical engineer, whose job it is to devise means of commercial production. He designs and builds a miniature "pilot plant," and, finally, his draftsmen plan the new commercial plant.

The plant's operating processes are shown in considerable detail; from the complicated processes emerge the final product, by-products and waste product. The work of the plant's analytical chemists is explained, and the sequence on the plant ends by showing how the liquid phosphorus which it produces is run into tank cars for solidification under water, prior to shipment. Further processing of the phosphorus to form concentrated phosphoric acid takes place in another plant. The uses of this product, in making things essential in our daily lives, form the closing scenes as the narrator emphasizes the contributions of research chemists and chemical engineers in creating and making available new products.

COMMITTEE OPINION—A good film for use in chemistry, general science, and in vocational guidance, from the junior high level through college. It was felt that the title might have been differently worded in order to indicate more accurately the content of the film. With appropriate supplementary discussion, the film should prove effective. Photography and sound are good; organization is fair.

FAIRY STORIES IN NATURAL COLOR FOR PRIMARY GRADES

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ALADDIN'S LAMP
OLD MOTHER HUBBARD
THE BIG BAD WOLF
MOLLY MOO-COW
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Please send me complete information on the New Package Subscription Plan.

School.....

Address..... City.....

Signed..... Title.....

Current Film News

■ Walter O. Gutlohn, Inc., 35 West 45th Street, New York City, announces the release of a series of 16mm sound films on Central America, entitled:

Way of Life—eight pictures—1 reel each. Titles are: *Zapotecan Potters, Coffee Democracy, Boys of Atitlan, Mayaland Today, Net Fishers of Patscuaro, City of Living Ruins, Silver Mountain Country,* and *Honduras.*

These pictures give valuable information on the customs, government, educational standards, industries and habits of the people—taking us into their homes where the typical family life may be observed. Among the countries pictured are Mexico, Costa Rica, Honduras, Guatemala.

■ Harmon Foundation, Inc., 140 Nassau Street, New York City, is distributing two new 16mm 2-reel silent motion pictures on art technique, planned and photographed by two artists, Mr. and Mrs. Simon Moselsio, of the Art Division at Bennington College, Bennington, Vermont.

Modeling a Portrait presents all of the steps to be taken in building up a portrait in clay, as the basic work in sculpture. Mr. Moselsio does the modeling, and Mrs. Moselsio the camera work. The various tools are demonstrated in use as under the artist's skillful hands the completed portrait takes form. Characteristics of various materials are considered as the sculptor decides upon the medium into which the clay will be translated for permanence.

How a Plaster of Paris Cast Is Made shows the complete technique of making a plaster of Paris cast from a clay portrait. The first reel covers the making of the cast itself. Reel two shows how the cast is separated, the clay model destroyed, and the two halves of the mold cleaned. They are then tied together and the plaster of Paris poured in for the cast. Hardening takes place and the chipping is begun to remove the plaster mold.

■ Duncan MacD. Little, 33 West 67th Street, New York, a foremost documentary film-maker, pictures the story of the pulpwood industry in the Province of Quebec, in his new production:

With Lumber-Jack and River-Driver (A film of the Haute Mauricie)—1500 feet, 40 min. running time. The four chapters of the film disclose the various details of all the forest operations—building of the dams in summer, felling, cutting and branding of the trees in autumn, transporting logs by sled to frozen lake in winter, carrying to the mills in spring, there to be "cooked" into pulp and fashioned into newsprint. The life, work, and hazards which surround the workers are sympathetically depicted, making the film an absorbing human as well as industrial record.

■ Garrison Films, 1600 Broadway, New York City, has issued a timely selection of motion pictures for school and community program use in a new catalog, *Films for Democracy.* Films available in 16mm silent and sound, covering important phases of adult and school-level programs of education for democracy, are described in the catalog, classified under the following subjects: "Our Cultural Heritage," "Our Political Heritage," "Our Natural Resources," "Our Industrial and Agricultural Resources," "Community Problems," "Labor and Management," "Housing," "Health," "Pan-Americana."

Garrison Films also announces the completion of arrangements to produce a series of twelve short films dealing with the background and nature of *American Folk Songs,* covering Regional, Spiritual, Cowboy, Ballads, and Work Songs.

■ Nu-Art Films, Inc., 145 West 45th Street, New York City, is releasing the film *Abraham Lincoln,* produced by D. W. Griffith and starring Walter Huston in four versions:

The Entire Life and Career of Abraham Lincoln—running time approximately one and one-half hours.

The Private Life and Public Life of Abraham Lincoln—approximately one hour.

The Public Life of Abraham Lincoln—approximately one-half hour.

Highlights of Lincoln's Career—approximately eleven minutes.

A study guide prepared by Frederick Houk Law, PH.D., Chairman of the Department of English, Stuyvesant High School, New York City, can be obtained which covers all four versions. This picture is recommended by the Department of Secondary Teachers of the National Education Association.

■ William H. Wells Productions is the name of a new organization formed by Julian Roffman, William H. Wells and David H. Lion, with offices at 545 Fifth Avenue, New York City. The new firm will specialize in the production of educational and social welfare films.

■ Al O. Bondy, 630 Ninth Avenue, New York City, is handling distribution for the film made recently for the New York City Civil Service Commission by Leo Seltzer and Elaine Basil, under the title:

Merit System Advancing—3 reels, 16mm and 35mm sound. It shows the type of job that comes under municipal civil service, how civil service job appointments operate as against the spoils system, and the advantages of the merit system. While the film presents civil service activities in New York City, it was made with an eye to general distribution and consequently shows typical activities.

■ American League of Professional Baseball Clubs, 310 S. Michigan Building, Chicago, have ready for free distribution the following new baseball movie:

Batting Around the American League—4 reels, 16mm and 35mm sound—written and directed by Lew Fonseca, Director of Promotion. The purpose of this picture is to teach youngsters baseball, and to give the fans a better knowledge of the many inside plays of the game. Beesides explaining fundamentals of play in normal and slow motion, highlights of the past baseball season are covered.

■ Photo & Sound, Inc., San Francisco, is handling the bookings and distribution in northern California of a series of 24 twenty-minute religious pictures, produced by Cathedral Pictures of Hollywood.

The series is in 16mm sound, each film telling the story of an episode in the life of Christ. The first four of the series now available for showing are. *Child of Bethlehem, The Certain Nobleman, The Prodigal Son,* and *Jesus and Zaccheaus.*

Representatives of all denominations have previewed the pictures and have approved the careful and authentic presentation of the new testament stories. The series is produced under the direction of the Reverend James K. Friedrich, Hollywood motion picture consultant on religion.

■ Rutgers Films, New Brunswick, New Jersey, has completed production on a new subject in their zoology series, entitled:

Mollusca, Reel II—1 reel, 16mm silent and color—presenting the mollusks found along the northern shores. Strikingly shown in color against naturalistic settings are Aeolis, Elysia, Natica, Purpura, Aporrhais, Buccinum, and Mya.

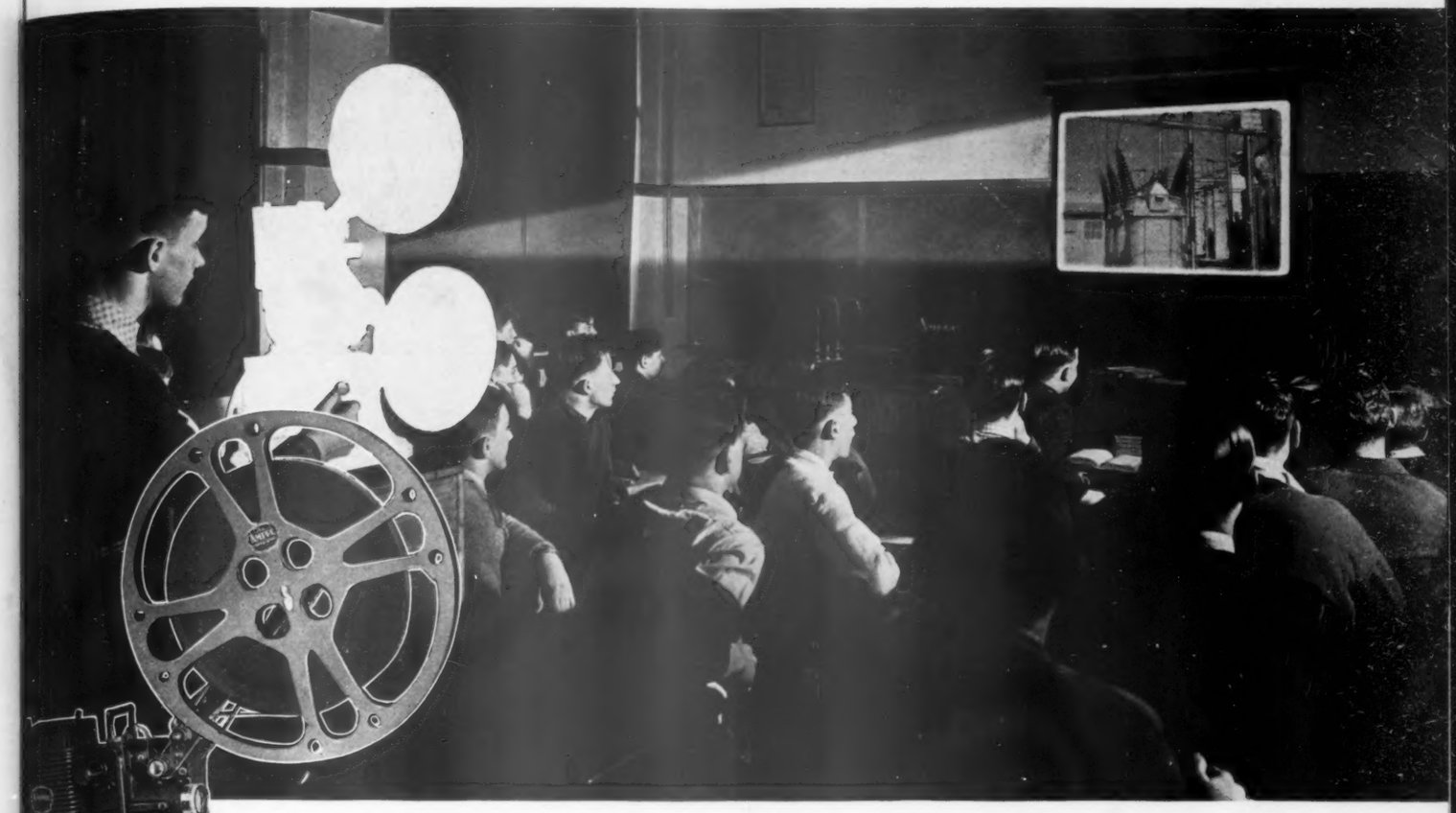
French and Spanish Editions of Castle Films

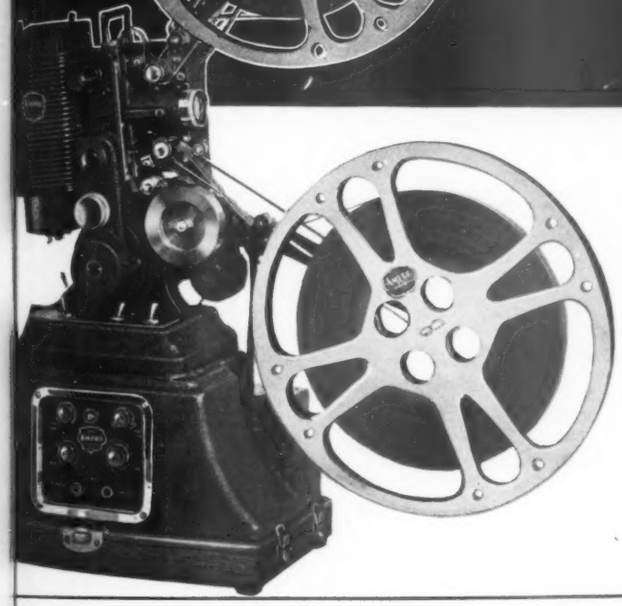
Of interest to teachers and students of Foreign Languages is the news that Castle Films is releasing French and Spanish editions of its travel, news and other educational 16 mm sound films. A list of the subjects now available with French and Spanish commentary can be obtained by writing direct to Castle Films, 30 Rockefeller Plaza, New York City.

San Francisco Branch for Filmosound Library

The Bell and Howell Company, Chicago, has opened a San Francisco Branch of its 16 mm Filmosound Library at Photo and Sound, San Francisco, who will handle the film distribution and rental for northern California, making it possible for 16 mm projection owners in that area to receive one day service on rentals. Bell and Howell now has three West Coast branches—Hollywood, San Francisco and Seattle.

"Every School Can Now Afford Sound on Film Projection"

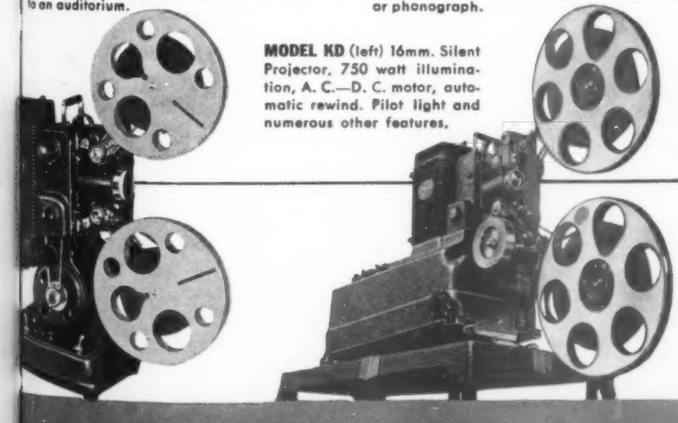




MODEL UA (above) 16mm. Sound-on-Film Projector—offering complete mixing of sound from film, microphone and phonograph—with ample volume for audiences ranging from a classroom to an auditorium.

MODEL YA (below) 16mm. Sound Projector, with 750-1000 watt illumination, A.C.—D.C. motor, silent and sound speeds, offering mixing of sound from film and microphone or phonograph.

MODEL KD (left) 16mm. Silent Projector, 750 watt illumination, A. C.—D. C. motor, automatic rewind. Pilot light and numerous other features.



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At many points in the educational program, motion pictures with sound possess definite proven advantages over other types of visual aids. With the many improvements in sound-on-film projectors — and the new lower price levels — all educators should once more check into the possibilities of utilizing fully this latest aid to effective teaching. Today, *every school*, regardless of size, location limitation of physical environment or finances, may now provide equal learning opportunities with the aid of Amprosound 16 mm. motion picture projectors. In collaboration with educational film libraries, a program may be planned which will make an outstanding contribution to any school and community. Ampro Educational Dealers are trained especially to provide service and information on all phases of Visual Education.

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☐ Ampro 16mm. Silent Convertible to Sound Models

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A Trade Directory for the Visual Field

FILMS

Akin and Bagshaw, Inc. (3)
1425 Williams St., Denver, Colo.

Bailey Film Service (3, 4)
1651 Cosmo St., Hollywood. Cal.

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 165

Castle Films (3)
R C A Bldg., New York City
(See advertisement on page 141)

College Film Center (3, 5)
59 E. Van Buren St., Chicago.

DeVry School Films (3, 4)
1111 Armitage Ave., Chicago

Dudley Visual Education Service (1)
736 S. Wabash Ave., Chicago
4th Fl., Coughlan Bldg.
Mankato, Minn.

Eastman Kodak Co. (1)
Teaching Films Division,
Rochester, N. Y.
(See advertisement on page 173)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

Eastman Kodak Stores, Inc. (3)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Edited Pictures System, Inc. (3)
330 W. 42nd St., New York City

Erpi Classroom Films, Inc. (2, 5)
35-11 35th Ave., Long Island City, N. Y.

Films, Inc. (3)
330 W. 42nd St., New York City
64 E. Lake St., Chicago
314 S. W. Ninth Ave., Portland, Ore.
(See advertisement on page 181)

Garrison Films (3,6)
1600 Broadway, New York City
(See advertisement on page 166)

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Walter O. Gutlohn, Inc. (3)
35 W. 45th St., New York City
(See advertisement on page 179)

Harvard Film Service (3, 6)
Biological Laboratories,
Harvard University, Cambridge, Mass.

Health Film Service (3)
First Nat'l Bank Bldg., Salem, Ore.
(See advertisement on page 169)

Hoffberg Productions, Inc. (2, 5)
1600 Broadway, New York City

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 181)

International Film Bureau (3, 5)
59 E. Van Buren St., Chicago

Lewis Film Service (3)
216 E. 1st St., Wichita, Kan.
(See advertisement on page 179)

Post Pictures Corp. (3)
723 Seventh Ave., New York City

Douglas D. Rothacker
729 Seventh Ave., New York City

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Co., Inc. (5)
Rockefeller Center, New York City
(See advertisement on page 167)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Vocational Guidance Films, Inc. (2)
Old Colony Bldg., Des Moines, Ia.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago
351 Turk St., San Francisco, Cal.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (3)
2839 N. Western Ave., Chicago
(See advertisement on page 183)

Bell & Howell Co. (3)
1815 Larchmont Ave., Chicago
(See advertisement on page 165)

DeVry Corporation (3, 6)
1111 Armitage St., Chicago
(See advertisement on inside front cover)

Eastman Kodak Stores, Inc. (3)
Kodascope Libraries
356 Madison Ave., New York City

Eastman Kodak Stores, Inc. (3)
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

General Films, Ltd. (3, 6)
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsch & Kaye (3)
239 Grant Ave., San Francisco, Cal.

Holmes Projector Co. (3, 6)
1813 Orchard St., Chicago
(See advertisement on page 178)

Ideal Pictures Corp. (3, 6)
28 E. Eighth St., Chicago
(See advertisement on page 181)

Jarrell-Ash Company
165 Newbury St., Boston, Mass.

RCA Manufacturing Co., Inc. (2)
Camden, N. J.
(See advertisement on page 177)

S. O. S. Cinema Supply Corp. (3, 6)
636 Eleventh Ave., New York City

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (3)
Davenport, Iowa
(See advertisement on page 171)

Visual Education Service (3)
131 Clarendon St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PICTURES

Informative Classroom Pictures
44 N. Division Ave., Grand Rapids, Mich.
(See advertisement on page 179)

SCREENS

Da Lite Screen Co.
2717 N. Crawford Ave., Chicago
(See advertisement on page 165)

Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES AND FILM SLIDES

Eastman Educational Slides
303 Greenleaf Ave.,
Wilmette, Ill.

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
28 E. Eighth St., Chicago, Ill.
(See advertisement on page 181)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 175)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 181)

Society for Visual Education, Inc.,
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spindler & Sauppe, Inc.
86 Third St., San Francisco
(See advertisement on page 169)

Visual Education Service
131 Clarendon St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 167)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on inside back cover)

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Eastman Kodak Stores, Inc.
1020 Chestnut St., Philadelphia, Pa.
606 Wood St., Pittsburgh, Pa.

General Films Ltd.
1924 Rose St., Regina, Sask.
156 King St., W. Toronto

Hirsch & Kaye
239 Grant Ave., San Francisco, Cal.

Jarrell-Ash Company
165 Newbury St., Boston, Mass.

Society for Visual Education, Inc.
100 E. Ohio St., Chicago, Ill.
(See advertisement on outside back cover)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 142)

Williams, Brown and Earl, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates 16mm silent.
(2) indicates 16mm sound.
(3) indicates 16mm sound and silent.
(4) indicates 35mm silent.
(5) indicates 35mm sound.
(6) Indicates 35mm sound and silent.

Continuous insertions under one heading, $1.50 per issue; additional listings under other headings, 75c each.